



YOUR GOALS. OUR MISSION.

**2013 GCCS Phase 4 and  
2014 GCCS Phase 1  
Construction Certification Report for Lorain  
County II Landfill**

**Prepared for:  
Republic Services, Inc.**

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NOV 4 2014  
**OHIO EPA NEDO**

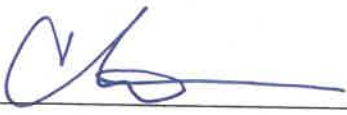
**October 2014**





# Notarized Statement

"I, Chris Jaquet, certify that this 2013 GCCS Phase 4 and 2014 Phase 1 GCCS Construction Certification Report for the Republic Services, Inc. Lorain County II Landfill in Lorain County, Oberlin, Ohio and all attachments were prepared in accordance with the provisions and requirements of Ohio Administrative Code (OAC) Rule 3745-27-08(H) effective August 2003. Based on my inquiry of the person or persons who were directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

  
Signature

10/23/14  
Date

Chris Jaquet  
Name

Area Environmental Manager  
Title

On this, the 23 day of October 2014, before me, a notary public, the above signed person, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

  
Notary Public

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LYNN C WILLIAMS  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 08-23-16





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## Engineer's Certification

"I, Jeff DeLaet, being a Registered Professional Engineer in the State of Ohio, PE No. PE55904, certify under penalty of law that this 2013 GCCS Phase 4 and 2014 GCCS Phase 1 Construction Certification Report for the Republic Services, Inc. Lorain County II Landfill in Lorain County, Oberlin, Ohio and all attachments were prepared by me or under my direction or supervision in accordance with the provisions and requirements of Ohio Administrative Code (OAC) Rule 3745-27-08(H) effective August 2003 and in accordance with good engineering practices. I have personally visited and examined the facility and am familiar with the information submitted in this document and based on my inquiry of the person or persons directly responsible for preparing this 2013 GCCS Phase 4 and 2014 GCCS Phase 1 Construction Certification Report, the information submitted in the 2013 GCCS Phase 4 and 2014 GCCS Phase 1 Construction Certification Report is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant civil and/or criminal penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature

Date

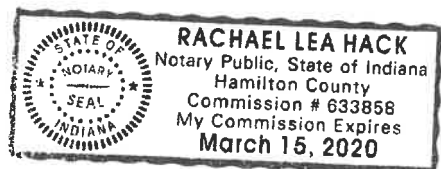
Jeff DeLaet, PE  
Name



On this, the 29th day of October 2014, before me, a notary public, the above signed person, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public





**NOTARIZED STATEMENT****ENGINEER'S CERTIFICATION**

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## 1.0 INTRODUCTION

The purpose of this 2013 Phase 4 and 2014 Phase 1 Gas Collection and Control System (GCCS) – Construction Certification Report (Certification Report) is to detail the materials, construction/installation methods, and observations and tests performed for the 2013 Phase 4 and 2014 Phase 1 GCCS – Construction Project at the Lorain County II Landfill (herein after referred to as the “Landfill”), Lorain County, Oberlin, Ohio. This Certification Report was prepared in general conformance with Ohio Administrative Code (OAC) 3745-27-08(H). The owner’s Notarized Statement and the Engineer’s Certification attesting to the accuracy and compliance of this Certification Report are included herein.

The Certification Report includes the following sections:

1. Introduction
2. Landfill Gas Extraction Wells
3. Landfill Gas Collection System
4. Airline and Force Main System
5. System Repairs and Maintenance

A discussion of each new or altered component of the Landfill GCCS materials, construction/installation methods, and observations/tests performed is provided in the appropriate section. Daily field logs, photographs, project record drawings, extraction well boring logs, laboratory test results, pipe pressure test results, and additional relevant information is provided in the appendices.

Under the approval of Republic Services, Inc. (Republic), maintenance was performed on the existing Landfill GCCS. Seven GCCS extraction wells were replaced (re-drilled) and 11 new GCCS extraction well were installed. No wells were drilled into the lined area of the landfill during this construction event.

The field work was performed from December 10, 2013 to March 31, 2014. Republic’s subcontractor, American Environmental Group Ltd. (AEGL) of Richfield, Ohio. AEGL, under the supervision of Kevin Shull (Gas Extraction System Operations Manager) and Jeff Enochs (Drilling Operations Manager), performed the construction/installation of the extraction wells and pipeline components. Construction quality assurance (CQA) oversight was performed by T&M Associates with Janet Todia providing day-to-day observations and documentation. Jeff DeLaet, PE, of T&M Associates (T&M) provided project management and served as the certifying engineer. Daily field logs and construction/installation photographs are included in Appendices A and B, respectively. Qualifications for Ms. Todia and Mr. DeLaet are included in Appendix C.

For the purposes of this Certification Report, CQA is used to refer to activities performed by T&M, where quality control (QC) refers to observation and testing activities performed by the GCCS component’s installer (AEG) and manufacturer (ISCO).

### 1.1 FIELD ALTERATIONS/DEVIATIONS

During the course of the construction/installation activities, minor alterations/deviations from the construction drawings were implemented in the field. These minor alterations/deviations are listed below, and are also reflected in the Project Record Drawings included in Appendix D:

- The following redrill wells were added to the drilling schedule. As construction commenced, it was determined the preexisting wells were pinched and needed to be replaced. EW-151R was drilled to a depth less than the scheduled bore due to encountering refusal on a solid substrate that could not be passed through with the drilling rig after attempting for over







thirty minutes to bore through the solid. EW-51R3 was not drilled to scheduled bore depth due to encountering sludge.

| Well ID | Actual Depth (ft.) | Scheduled Bore Depth (ft.) |
|---------|--------------------|----------------------------|
| EW-151R | 111                | 100                        |
| EW-51R3 | 96                 | 120                        |

- One new additional well was drilled for dewatering and gas collection purposes. This well is designated as “Rock Sump” (monitoring point ID RSW-1). This well was drilled to a depth less than scheduled bore depth due to encountering completely saturated conditions that caved in the annulus of the bore.

| Well ID | Actual Depth (ft.) | Scheduled Bore Depth (ft.) |
|---------|--------------------|----------------------------|
| RSW-1   | 25                 | 35                         |

- The following wells were drilled to a depth less than the scheduled bore depth due to refusal for the following noted reasons.

| Well ID | Scheduled Bore Depth (ft.) | Actual Depth (ft.) | Reason for Refusal                              |
|---------|----------------------------|--------------------|-------------------------------------------------|
| EW-45R3 | 110                        | 89                 | Encountered sludge                              |
| EW-50R3 | 99                         | 71                 | Encountered sludge                              |
| EW-327  | 37                         | 24                 | Bore hole watered in during drilling            |
| EW-172  | 75                         | 54                 | Impassable obstruction encountered in substrate |

- No pumps were installed in new wells EW-330, EW-331, EW-333, EW-334, EW-329, and EW-328. When the wells were gauged for liquid levels, all of these new wells were dry. As these wells continue to be monitored for liquid levels in the future, pumps will be installed as necessary.
- The vacuum source for new well EW-172 was tied into the preexisting 6” lateral at EW-327 due to the estimated depth of the tie in to the 12” subheader (>10’) that was originally proposed as the tie-in point.
- The 2” airline and 2” force main isolation valves were proactively installed for future trouble shooting purposes and construction isolation along with the new 12” isolation valve that terminates the new 12” subheader to the west (near well EW-172).
- An additional well designated as RSW-1 (“Rock Sump”) was drilled for dual extraction purposes. The air and force main source for the pump installed in RSW-1 was obtained from making a connection to the airline and force main isolation valves mentioned above near the 12” subheader termination point to the west. Also, the vacuum source for the 6” lateral for RSW-1 was obtained from the preexisting 6” lateral at EW-55R.





- A CMP (corrugated metal pipe 16 gauge) was installed at the following road crossing locations:
  - 12" CMP (two 20' lengths) from EW-303R to EW-307R
  - 18" CMP (two 20' lengths) from the 12" subheader to EW-46R2
  - 18" CMP (two 20' lengths) from the 12" subheader to EW-45R2
  - 12" CMP (two 20' lengths) from the 12" subheader to EW-42R2
  - 18" CMP (two 20' lengths) from the north 12" subheader to EW-330
- Site Operations and Maintenance technicians discovered that the north 12" subheader was being impacted by surging. Therefore, approximately 200' of 12" subheader was uncovered and regraded to 3-percent from monitoring point H12 eastward.
- During well field monitoring events, well EW-51R3 had lost vacuum from its original vacuum source at EW-153R. Therefore, a new 6" lateral was installed from EW-51R3 to the preexisting 6" lateral vacuum source at EW-50R3. In addition, a 2" airline and 3" force main was installed in the same trench for future pump placement.
- Site Operations and Maintenance technicians determined that the field was reflecting a 20.0" w.c. (water column) loss of available vacuum on the east side of the well field between monitoring points H5 and EW-30. It was also determined that this correlated with an air pressure loss in the compressed air conveyance system that supplies all pneumatic pumps in the well field. Therefore, in order to restore the available vacuum loss and compressed air system to full pressure, the 24" header was replaced beginning at monitoring point EW-30 north to the access road including placement of the airline and force main in the same trench. This repair was performed above liner until the transition to the unlined area. As such, dual-contained force main was appropriately used above liner. Where liner was impacted for the excavation at approximately EW-30, a liner patch repair was made and is documented in this report.
- As a proactive measure to alleviate potential ambient air influence that could be caused by conveyance along former well casings and vacuum risers that remained above liner from construction events performed long ago, 15 former well locations were revisited to appropriately abandon their risers below grade along with certified liner repairs.





## 2.0 LANDFILL GAS EXTRACTION WELLS

A total of eleven new and seven replacement extraction wells were installed at the Landfill. The new extraction wells are listed in the following Table 1:

Table 1. New Extraction Wells

EW-172, EW-173, EW-327, EW-328, EW-329,  
EW-330, EW-331, EW-332, EW-333, EW-334,  
and RSW-1 (Rock Sump)

Existing extraction wells that were abandoned and replaced are listed in the following Table 2:

Table 2. Existing Landfill Gas Extraction Wells

| Replacement | Abandoned |
|-------------|-----------|
| EW-42R2     | EW-42R    |
| EW-45R3     | EW-45R2   |
| EW-46R2     | EW-46R    |
| EW-50R3     | EW-50R2   |
| EW-151R     | EW-151    |
| EW-51R3     | EW-51R2   |
| EW-303R     | EW-303    |

Existing extraction wells were abandoned by excavating around the existing well casing to an approximate 5' depth below the existing ground surface and cutting off the exposed casing. After filling the casing with soil, a polyvinyl chloride (PVC) slip cap, with a bead of silicone gel inside the cap, was lag-bolted on top of the well casing and the excavation was backfilled with the excavated materials and clean onsite soil, as needed.

Those existing extraction wells that were located within the final cover area were abandoned by excavating the vegetative/protective soils around the existing well casing down to the geosynthetic components of the final cover system. The geosynthetics were removed/cut to expose the underlying recompacted soil barrier (RSB) component of the final cover system only to the extent required to provide access to continue excavating around the existing well casing. The excavation into the RSB was limited to 1' to 2'. The excavation was then backfilled and recompacted with the RSB material. The geosynthetic components of the final cover system were repaired and/or replaced (see Section 2.2 for a discussion of how the repairs were performed) and the excavated vegetative/protective soils were placed in the excavation back to the level of the adjacent soil material.

The eleven new extraction wells, listed in Table 1, were connected to the Landfill GCCS using 6" HDPE lateral pipelines ("laterals", tees, and well risers. Most of the seven re-drilled (replacement) extraction wells are connected to the Landfill GCCS with a 6" lateral that ties into the 6" lateral that served the associated abandoned extraction well. In some cases, vacuum had been lost at the associated abandon extraction well and new 6" laterals had to be run to restore vacuum at the location.





New wells were tied into the existing GCCS as follows:

- EW-172 is tied into the new 6" lateral at EW-327.
- EW-173 is tied into the preexisting 12" header east of EW-59.
- EW-327 is tied into a new 6" lateral that is connected to the new 12" north header.
- EW-328 is tied into a new 6" lateral that is connected to the new 12" north header
- EW-329 is tied into a new 6" lateral that is connected to the new 12" north header.
- EW-330 is tied into a new 6" lateral that is connected to the new 12" north header.
- EW-331 is tied into a new 6" lateral that is connected to the new 12" north header.
- EW-332 is tied into the preexisting 6" lateral at EW-301.
- EW-333 is tied into the new 6" lateral that is connected to the new 12" north header.
- EW-334 is tied into a new 6" lateral that is connected to the new 12" north header.
- RSW-1 (Rock Sump) is tied into the preexisting 6" lateral at EW-55R.

The seven re-drilled (replacement) extraction wells were tied into the existing GCCS as follows:

- EW-42R2 is tied into the preexisting 6" lateral at EW42R.
- EW-45R3 is tied into the preexisting 6" lateral at EW-45R2.
- EW-46R2 is tied into the preexisting 6" lateral at EW46R.
- EW-50R3 is tied into the new 6" lateral that is connected to the new 12" north header.
- EW-151R is tied into the preexisting 6" lateral at EW-151.
- EW-51R3 is tied into the preexisting 6" lateral at EW-51R2.
- EW-303R is tied into the preexisting 6" lateral at EW-307R.

None of the extraction wells installed for the 2013 Phase 4 and 2014 Phase 1 GCCS program were installed within the area of the Landfill with final cover present (location of installed extraction wells is shown on the Project Record Drawings in Appendix D). However, geosynthetic components of the final cover system were compromised to remove old well abandonments left above grade from previous construction events. Geosynthetic repairs were also required for unanticipated replacement of 24" header, and airline and force main on the east side of the system due to available vacuum loss. Repairs of the geosynthetic components were performed by AEGL (see Section 2.2 for a discussion of how the repairs were performed). The repairs provided a continuous and intact barrier at each repair location.

## **2.1 MATERIALS**

The materials used for the construction/installation of the new and replacement extraction wells included the following:

- 6" and 8" diameter solid and perforated SDR11 HDPE pipe with HDPE butt caps (bottom of well) and 6" and 8" Schedule 40 PVC temporary caps (top of well)
- No. 4 stone (1" to 3" washed non-carbonate) backfill material
- 8-mesh granulated bentonite
- Nominal 40-mil thick LLDPE flexible membrane liner (FML)







- Geocomposite
- HDPE extrusion welding rod

## 2.2 CONSTRUCTION/INSTALLATION METHODS

Equipment used to construct/install the extraction wells included an IMT AF-130 track-mounted drill rig, Caterpillar 953D track-mounted loader, JCB 725 articulated dump truck, ISCO Hotline HDPE butt-fusion pipe welding equipment, DemTech Pro-X extrusion welder and Pro-Tester, hot air machine, DemTech vacuum box, and various hand tools. The general construction/installation methods were as follows:

- A field survey was conducted by the Wellert Corporation of Medina, Ohio, to stake the design location for each extraction well and the final well schedule was updated accordingly (see Appendix E for the landfill gas well boring logs).
- Boreholes for the extraction wells were drilled into the waste in advance of installing the extraction well materials and equipment. Drilling was performed using an IMT AF-130 track-mounted drill rig with a 36" diameter auger to the depth for each individual extraction well indicated in the final extraction well schedule.
  - Waste material encountered within the borehole was placed in the articulated dump truck for transportation and disposal at the active working face of the Landfill.
- Depth of the borehole was controlled and verified using a weighted tape measure. As the auger advanced, the cuttings were visually observed to ensure no geosynthetics were encountered. Waste temperatures and waste composition were also recorded (see boring logs in Appendix E).
- Final borehole depth was confirmed using a weighted tape measure prior to extraction well casing placement.
- Solid wall and perforated sections of HDPE pipe were butt-fusion welded to the lengths provided in the final extraction well schedule for placement into the borehole. A typical detail for the extraction well construction is provided on the Project Record Drawings in Appendix D.
- Using the Caterpillar 953D track-mounted loader, the welded HDPE casing was raised and slipped into the borehole. A metal grate was placed around the casing to position the casing as close as possible to the middle of the borehole. The casing was secured to the metal grate to prevent the casing from sagging.
- No. 4, washed, non-carbonate stone was placed in the borehole annulus from the bottom up to a minimum of 2' above the top of the perforated section of the 6" or 8" HDPE casing. The geotechnical test results for the No. 4 stone are provided in Appendix F.
- Geonet with geofabric (i.e., Geocomposite), which was heat-bonded to one side of the geonet, was placed over the stone with the geonet in contact with the stone. A 1' clean soil plug was placed on top of the geofabric overlying the geonet.
- A 2' thick (minimum) granular bentonite seal was placed on top of the clean soil plug. The granular bentonite was hydrated with water and on-site clean soil material was placed on top of the granular bentonite seal. The clean soil material varied in thickness. The 2' thick (minimum) granular bentonite seal was placed on top of the clean soil material so that the top of the upper granular bentonite seal extended a minimum of 6" into the cover soil.
- Repairs to the geosynthetic components of the final cover system consisted of installing and extrusion welding a "boot sleeve" around the new replacement well casing and





extrusion welding the boot sleeve to the FML component of the final cover system. The repair procedures included the following:

- The excavator and hand tools were used to expose an area around the new replacement well casing.
  - Surface of the existing FML was cleaned of debris.
  - A section of the 40-mil LLDPE FML was cut to overlay the damaged area of the existing FML by a minimum of six inches.
  - The 40-mil LLDPE FML boot sleeve was placed over the casing leaving enough material to secure the boot sleeve to the casing.
  - The 40-mil LLDPE FML boot sleeve was heat-bonded to the existing FML component of the final cover system and the new replacement well casing.
  - A hand grinder (60-grit sand paper) was used to prepare the area of the existing FML component where the extrusion welding would be performed prior to initiating welding.
  - Trial welds were performed for the extrusion welders prior to performing the extrusion welding of the 40-mil LLDPE FML boot sleeve to the existing FML component of the final cover system.
  - The 40-mil LLDPE FML boot sleeve was extrusion welded to the existing FML component of the existing final cover system and the new replacement well casing.
  - The geocomposite was repaired by placing a section of geocomposite material cut to overlay the damaged area by a minimum of 1'.
- Schedule 40 PVC temporary caps were installed using set screws and silicone sealant on top of the new well casings. Upon completion of the Landfill GCCS piping, Landtec wellheads were installed as permanent replacements for the temporary caps. In most cases, each newly drilled extraction well was connected the same day to either temporary or permanent vacuum laterals to proactively mitigate potential odor issues. All wells and associated risers were marked with reflective tape to increase visibility.
  - Landtec wellheads were installed using flexible couplers secured with hose clamps.

## **2.3 OBSERVATIONS/TESTS**

The following observations and tests were performed during the construction/installation of the new and replacement extraction wells:

- Materials used in the construction/installation of the new and replacement extraction wells were visually observed for conformance with the construction drawings, as well as to verify there were no signs of damage. The extraction well casing materials were determined to be in conformance with the construction drawings and no visual damage to the materials was observed.
- Perforation size (diameter) and pattern (spacing around the circumference and along the length) for the perforated portion of the extraction well casings were observed for general conformance with the construction drawings.





- Boreholes were observed during the drilling to document that the boreholes were completed to the appropriate depth as provided in the final extraction well schedule provided on the Project Record Drawings included in Appendix D.
- No. 4 washed non-carbonate stone was used to backfill the annular space between the perforated extraction well casing and the borehole. The geotechnical test results for the gradation and carbonate content of the No. 4 stone are provided in Appendix F.
- T&M Associates CQA monitor observed the butt-fusion welding process used to connect the HDPE pipe casing sections together to verify appropriate welding procedure guidelines were followed. The butt-fusion welding was performed according to acceptable standards.
- T&M Associates CQA monitor obtained and recorded measurements to verify the extraction wells were constructed according to the construction drawings as well as to create the Project Record Drawings.
- The AEGL driller and the T&M Associates CQA monitor recorded refuse temperature, composition, and degree of moisture at approximately five-foot intervals during drilling activities. The AEGL well logs are provided in Appendix E.

The following observations and tests were performed during the installation of the 40-mil LLDPE FML repairs:

- T&M Associates CQA monitor performed visual observation and documentation of the repairs and vacuum box testing.
- Prior to welding of the 40-mil LLDPE FML to the existing FML and new replacement well casing, trial welds were performed using the extrusion welder. Test sections of the welds were cut and a tensiometer was used to perform three peel and three shear tests on the test weld sections. The minimum required value for a passing peel test for 40-mil LLDPE is 60 lb/in. The minimum required value for passing a shear test for 40-mil LLDPE is 44 lb/in. The results of the peel and shear tests are presented in Appendix G.

## 2.4 AIR MONITORING

Air monitoring was performed during the drilling of the new and replacement extraction wells. A multi-gas QRAE monitoring device, manufactured by RAE Systems, was used to conduct the air monitoring. The atmospheric concentrations within the breathing zone were monitored for methane (lower explosive limit [LEL]), oxygen, carbon monoxide, and hydrogen sulfide. The air monitoring results, which were recorded by the T&M Associates CQA monitor, are provided in Appendix H.





### 3.0 LANDFILL GAS COLLECTION SYSTEM

AEGL installed the GCCS components required to incorporate the new extraction well and the replacement extraction wells into the existing GCCS. Approximately 2,370 linear feet of 6" SDR17 solid-wall HDPE pipe was installed to connect the new extraction well and the replacement extraction wells on line with the existing Landfill GCCS. Approximately 720 linear feet of 12" SDR17 solid-wall HDPE pipe was used to construct the new header and tie into the upper and lower 24" header pipelines. The approximate linear footage of pipeline installed is included in the daily field logs for AEGL (see Appendix A).

#### 3.1 MATERIALS

The components used to connect the new and replacement extraction wells into the existing Landfill GCCS included the following:

- 6" diameter solid SDR17 HDPE lateral pipe
- 6" diameter perforated SDR17 HDPE pipe (north horizontal)
- 12" diameter solid SDR17 HDPE header pipe
- Landtec well heads and combination well heads
- Various sizes of HDPE tie-in couplings, reducers, tees, elbows and other fittings and appurtenances

#### 3.2 CONSTRUCTION/INSTALLATION METHODS

Equipment used to connect the new and replacement extraction wells into the existing Landfill GCCS included Caterpillar 320D and 325C track-mounted excavators, Caterpillar 725 articulated dump trucks, Caterpillar D4K and D6K track-mounted dozers, ISCO Hotline HDPE butt-fusion pipe welding equipment, and various hand tools.

The general construction/installation methods used to connect the new and replacement extraction wells into the existing Landfill GCCS were as follows:

- HDPE pipe of various diameters was delivered to the Landfill and stored in the designated area(s).
- The 6" and 12" HDPE pipe was butt-fusion welded on-site by AEGL prior to being connected to the existing Landfill GCCS.
- HDPE pipe was placed in the trenches following completion of the excavation.
  - HDPE pipe was installed to achieve the minimum design slopes of 3-percent within the limits of waste.
  - Pipe bedding consisted of clean cover soil material removed from the trench excavation.
  - Survey markers were placed at 50' intervals along the pipelines, at road crossings, and at fitting locations. The survey markers were removed following completion of the field survey activities.
- Installed pipelines, fittings, components, and road crossings were field surveyed after installation from a third order benchmark using global positioning system (GPS) technology.
  - Locations of the pipelines, components, and appurtenances are provided on the Project Record Drawings in Appendix D.







- 5-mil x 3" underground detectable tape with the words "CAUTION BURIED GAS LINE BELOW" was placed approximately 1' above the HDPE pipe during backfilling activities.
- Waste material encountered within the excavated soil was separated from the soil as the trenches were backfilled. The waste material was placed in an articulated dump truck for transportation and disposal at the active working face of the Landfill.
  - Additional soil was obtained from an onsite stockpile to augment the backfill soil, if needed.

### 3.3 OBSERVATION/TESTS

The following observations and tests were performed during the connection of the new and replacement extraction wells to the existing Landfill GCCS:

- Pipe was visually observed for conformance with the construction drawings, as well as to verify there were no signs of damage. The pipe was determined to be in conformance with the construction drawings and no visual damage to the pipe was observed.
- Butt-fusion welds were visually observed prior to back-filling the trenches. T&M CQA monitors observed hot plate temperature, holding times, and welding techniques. The welds were determined to be in conformance with the specifications.
- Pipelines were pressure tested prior to being connected to the existing Landfill GCCS, and while in place. Pressure tests consisted of applying a minimum of 25 psi for 6" SDR17 and 10 psi for 12" SDR17 and 24" SDR26 HDPE. All tests were conducted over a minimum four-hour period. Prior to beginning the test, during the test, and following completion of the test, the gauges were visually assessed for damage and proper units of measurement. The results of the pressure tests determined that the pipelines did not have any leaks. Pipe pressure test results are provided in Appendix I.
- The geotechnical results for the No. 4 stone was reviewed and determined to be in compliance with the gradation and carbonate residue requirements (minimum acceptable carbonate content  $\leq 5$  percent). Testing results are presented in Appendix F.





## 4.0 AIRLINE AND FORCE MAIN SYSTEM WORK PLAN

AEGL installed the airline and force main system components required to incorporate the new extraction well leachate pumps into the existing Landfill GCCS. A total of three pneumatic pumps were installed at the Landfill as listed in Table 3. An estimated 4,336 linear feet of HDPE pipe was installed to connect the new extraction well pumps with the leachate collection and compressed air system. Of that linear footage of pipeline installed, 1,911 linear feet was 2" diameter HDPE airline, 356 linear feet was 2" x 4" diameter dual-contained HDPE leachate force main, 80 linear feet was 3" diameter HDPE force main, 257 was 3" diameter airline, and 1,732 linear feet was 4" diameter HDPE leachate force main. The approximate linear footage of pipeline installed is included in the daily field logs for AEGL (see Appendix A).

Table 3. Extraction Well Pumps and Depths

| Well    | Pump Depth (ft) |
|---------|-----------------|
| EW-327  | 23              |
| EW-151R | 97              |
| RSW-1   | 24              |

Two-inch and three-inch airline and 3", 4", and 2" x 4" force main was installed to operate newly installed pumps and to accommodate future installation of additional pumps. The airline and force main was connected to the existing airline and force main by pinching the preexisting lines and butt fusing new lines to extend the runs. The locations of the new extended airlines and force main are shown on the Project Record Drawings in Appendix D.

### 4.1 MATERIALS

The airline and force main components include the following materials:

- 2" diameter SDR9 HDPE pipe (airline)
- 2" diameter SDR11 HDPE pipe (force main carrier pipe)
- 4" diameter SDR11 HDPE pipe (force main containment pipe)
- 3" diameter SDR11 HDPE pipe (force main carrier pipe)
- 6" diameter SDR17 HDPE pipe (force main containment pipe)
- 12" diameter corrugated metal pipe (road crossing encasement)
- QED Pneumatic pumps and associated hardware
- Various sizes of HDPE tees, fittings, and appurtenances

### 4.2 CONSTRUCTION/INSTALLATION METHODS

Equipment used to install the airline and force main system included Caterpillar 320D track-mounted excavators and CAT 725 articulated dump trucks, electro-fusion couplers and welding equipment, ISCO Hotline butt-fusion welding equipment and various hand tools.





The general construction/installation methods used to install the airline and force main system were as follows:

- The HDPE pipe was butt-fusion welded on-site by AEGL.
- A trench was excavated at the specified location to a depth of approximately 36 inches below the existing ground surface.
- The leachate force main and airline piping were placed in a trench on a bed of compacted soil and backfilled with clean on-site soil.
- Waste encountered was separated from the fill as the trench was backfilled. Excavated waste was placed in an articulated dump truck for disposal at the active working face of the Landfill.
- Riser pipes at each extraction well were connected to the pumps installed in the extraction wells listed in Table 3.

#### **4.3 OBSERVATIONS/TESTS**

The following observations and tests were performed during the installation of the leachate force main and airline:

- The HDPE pipe was visually observed for conformance with the construction drawings, as well as to verify there were no signs of damage. The pipe was determined to be in conformance with the construction drawings and no visual damage to the pipe was observed.
  - Butt-fusion welds were visually observed to be completed according to the butt-fusion welding specifications.
- Installed force main and airlines were pressure tested prior to being connected to the existing Landfill GCCS. The pressure test for the airline consisted of applying 100 psi of pressure over a minimum 4-hour period. The pressure test for the leachate force main consisted of applying 50 psi of pressure over a minimum 4-hour period. Prior to beginning the test, during the test, and following completion of the test, the gauges were visually assessed for damage and proper units of measurement. The results of the pressure tests determined that the pipelines did not have any leaks. Pipe pressure test results are provided in Appendix I.
- For testing of dual-contained force main, the interior 2" force main was pressurized to 60 psi and the exterior 4" containment line was tested to 50 psi over a minimum 4-hour period.





## 5.0 SYSTEM REPAIRS AND MAINTENANCE

Gas header line repairs/maintenance were performed by AEGL. The following repairs/maintenance activities were performed:

- Site Operations and Maintenance technicians discovered that the north 12" subheader was being impacted by surging. Therefore, approximately 200' of 12" subheader was uncovered and regraded to 3-percent from monitoring point H12 eastward.
- During well field monitoring events, well EW-51R3 had lost vacuum from its original vacuum source at EW-153R. Therefore, a new 6" lateral was installed from EW-51R3 to the preexisting 6" lateral vacuum source at EW-50R3. In addition, a 2" airline and 3" force main was installed in the same trench for future pump placement.
- Site Operations and Maintenance technicians determined that the field was reflecting a 20.0" w.c. (water column) loss of available vacuum on the east side of the well field between monitoring points H5 and EW-30. It was also determined that this correlated with an air pressure loss in the compressed air conveyance system that supplies all pneumatic pumps in the well field. Therefore, in order to restore the available vacuum loss and compressed air system to full pressure, the 24" header was replaced beginning at monitoring point EW-30 north to the access road including placement of the airline and force main in the same trench. This repair was performed above liner until the transition to the unlined area. As such, dual-contained force main was appropriately used above liner. Where liner was impacted for the excavation at approximately EW-30, a liner patch repair was made and is documented in this report.
- As a proactive measure to alleviate potential ambient air influence that could be caused by conveyance along former well casings and vacuum risers that remained above liner from construction events performed long ago, 15 former well locations were revisited to appropriately abandon their risers below grade along with certified liner repairs.

### 5.1 MATERIALS

The components used to repair and maintain the existing Landfill GCCS included the following:

- 2" diameter HDPE SDR9 pipe (airline)
- 3" diameter SDR11 HDPE force main
- 2" diameter SDR11 HDPE pipe (force main carrier pipe)
- 4" diameter SDR11 HDPE pipe (force main containment pipe)
- 6" diameter solid SDR17 HDPE lateral pipe.
- 24" diameter solid SDR26 HDPE lateral pipe.
- Various sizes of HDPE tie-in couplings, reducers, tees, and other fittings and appurtenances.

### 5.2 CONSTRUCTION/INSTALLATION METHODS

Equipment used to perform the GCCS repairs and maintenance included Caterpillar 320D and 325C track-mounted excavators, Caterpillar 725 articulated dump trucks Caterpillar D4K and D5K dozers, butt-fusion and electro-fusion welding equipment and various hand tools.







The general construction/installation methods used to repair and maintain the existing Landfill GCCS were as follows:

- HDPE pipe of various diameters was delivered to the Landfill and stored in the designated area(s).
- The 6" and 12" HDPE pipe was butt-fusion welded on-site by AEGL prior to being connected to the existing Landfill GCCS.
- HDPE pipe was placed in the trenches following completion of the excavation.
  - HDPE pipe was installed to achieve the minimum design slopes of 3-percent within the limits of waste.
  - Pipe bedding consisted of clean cover soil material removed from the trench excavation.
  - Survey markers were placed at 50' intervals along the pipelines, at road crossings, and at fitting locations. The survey markers were removed following completion of the field survey activities.
- Installed pipelines, fittings, components, and road crossings were field surveyed after installation from a third order benchmark using global positioning system (GPS) technology.
  - Locations of the pipelines, components, and appurtenances are provided on the Project Record Drawings in Appendix D.
  - 5-mil x 3" underground detectable tape with the words "CAUTION BURIED GAS LINE BELOW" was placed approximately 1' above the HDPE pipe during backfilling activities.
- Waste material encountered within the excavated soil was separated from the soil as the trenches were backfilled. The waste material was placed in an articulated dump truck for transportation and disposal at the active working face of the Landfill.
  - Additional soil was obtained from an onsite stockpile to augment the backfill soil, if needed.

### 5.3 OBSERVATIONS/TESTS

The following observations and tests were performed during the above detailed construction activities:

- Pipe, shop-fabricated tees and branch saddles, electro-fusion couplers, elbows, flanges and appurtenances were visually observed to verify there was no sign of damage. No visual damage to the materials installed for the GCCS maintenance activities was observed.
- Backfilling operations were monitored to assure that there were no negative impacts to the new and existing components of the GCCS system.
- Butt-fusion welds for the various pipe sizes were visually observed prior to back-filling the trenches. T&M Associates CQA monitor observed hot plate temperature, fusion pressure, holding times, and welding techniques. The welds were determined to be in conformance with the butt-fusion welding specifications.
- Electro-fusion welds were visually observed to be completed according to the electro-fusion welding specifications.
- Installed lateral pipelines were pressure tested prior to being connected to the existing Landfill GCCS. The pressure test for the lateral pipelines consisted of applying a minimum





of 25 psi of pressure over a minimum 4-hour period. Prior to beginning the test, during the test, and following completion of the test, the gauges were visually assessed for damage and proper units of measurement. The results of the pressure tests determined that the pipelines did not have any leaks. Pipe pressure test results are provided in Appendix I.





## APPENDIX A – Daily Field Logs





American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/5/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |          |
|----------------------------|----------|
| DAILY CONDITIONS:          | cold     |
| START TIME                 | 7:00a.m. |
| STOP TIME                  | 6:00p.m. |

### COMMENTS (Description of Work Order Completed):

Today we fused pipe in stringers.

Thomas A. Tadi 12/5/13  
CLIENT REPRESENTATIVE DATE  
Thomas A. Tadi CQA  
NAME & TITLE

Thomas Lafolett 12-5-13  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/6/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |          |
|----------------------------|----------|
| DAILY CONDITIONS:          | cold     |
| START TIME                 | 7:00a.m. |
| STOP TIME                  | 6:00p.m. |

### COMMENTS (Description of Work Order Completed):

Today we continued to fuse pipe.

CLIENT REPRESENTATIVE

DATE

Thomas Lafolett

12-6-13

AEGL SUPERINTENDENT

DATE

NAME & TITLE





American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/9/2013

PROJECT NAME: Lorain Landfill

CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction                        |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-------------------------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                              | INSTALLED QUANTITY |                                              |              |
| VALVES:                                                     |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                                |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                                         |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                              |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                                             |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                                  |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                                |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>3-man crew |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                             |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                                             |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                             |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                                             |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                             |                    | LATERAL: #                                   | PIPE DIA.    |
|                                                             |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                             |                    | LATERAL: #                                   | PIPE DIA.    |
|                                                             |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                             |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                                             |                    | STATION:                                     | LINEAR FT.   |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |

### WEATHER & TIME INFORMATION

DAILY CONDITIONS: cold

START TIME 7:00a.m.

STOP TIME 5:00p.m.

### COMMENTS (Description of Work Order Completed):

Today we spent day building bench.

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Bob Minor

12-9-13

AEGL SUPERINTENDENT

DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/10/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction                        |                    | PIPELINE INSTALLATION DETAILS / Construction |                     |
|-------------------------------------------------------------|--------------------|----------------------------------------------|---------------------|
| INSTALLED ITEM                                              | INSTALLED QUANTITY |                                              |                     |
| VALVES:                                                     |                    | HEADER: #                                    | PIPE DIA.           |
| VALVE STEMS:                                                |                    | STATION:                                     | LINEAR FT.          |
| LAND-TEC WELLHEADS:                                         |                    | HAR:                                         | TRENCH DEPTH        |
| IN-LINE SUMPS:                                              |                    | HEADER: #                                    | PIPE DIA.           |
| QED VAULT KITS:                                             |                    | STATION:                                     | LINEAR FT.          |
| QED PUMPS:                                                  |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
| ENCASEMENTS:                                                |                    | HORIZONTAL: #                                | PIPE DIA.           |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>4-man crew |                    | STATION:                                     | LINEAR FT.          |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                                             |                    | HORIZONTAL: #                                | PIPE DIA.           |
|                                                             |                    | STATION:                                     | LINEAR FT.          |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                                             |                    | HORIZONTAL: #                                | PIPE DIA.           |
|                                                             |                    | STATION:                                     | LINEAR FT.          |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                                             |                    | LATERAL: # EW-50R3,EW-72,EW-327              | PIPE DIA. 6"SDR17   |
|                                                             |                    | STATION: 0+00-3+25                           | LINEAR FT. 340'     |
|                                                             |                    | RISER HEIGHT: 5' EA.                         | TRENCH DEPTH 3'-5'  |
|                                                             |                    | LATERAL: #                                   | PIPE DIA.           |
|                                                             |                    | STATION:                                     | LINEAR FT.          |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                                             |                    | AIR & FM: # EW-50-R3,EW-72,EW-327            | PIPE DIA. 2" & 4"   |
|                                                             |                    | STATION: 0+00-3+25                           | LINEAR FT. 340' EA. |
|                                                             |                    | RISER HEIGHT: 5' EA.                         | TRENCH DEPTH 3'-5'  |

### COMMENTS (Description of Work Order Completed):

Today we started by uncovering tie in point for 12" valve ,after our morning safety meeting.We then began to trench lateral,starting with 90's and 5' risers on all three lines at EW-50R3? and running to station 1+43 where we installed tee's in all three lines for well EW-72?.We then continued to station 2+68 where we installed tee's and risers for future well EW-327? and ended at station 3+25 where we will conct to header line.We spent the remainder of the day backfilling,running caution tape and risers and dressing up all worked areas.

James Peck 12/10/13  
CLIENT REPRESENTATIVE DATE

James Peck 12-10-13  
AEGL SUPERINTENDENT DATE

Donat A Todia CQA  
NAME & TITLE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/11/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction                                          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-------------------------------------------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                                                       |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                                                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                                                |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                                                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                                                  |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>We had a crew of 4-men today |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                                                               |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                                                               |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                                                               |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                                                               |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                                                               |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                                                               |                    | STATION:                                     | LINEAR FT.   |
|                                                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

### COMMENTS (Description of Work Order Completed):

Today we continued to fuse pipe and make up fittings.

Tom A. Todia 12/11/13  
CLIENT REPRESENTATIVE DATE

Tom A. Todia CQA  
NAME & TITLE

Bob Minor 12-11-13  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/12/2013

PROJECT NAME: Lorain Landfill

CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction                        |                    | PIPELINE INSTALLATION DETAILS / Construction |                    |
|-------------------------------------------------------------|--------------------|----------------------------------------------|--------------------|
| INSTALLED ITEM                                              | INSTALLED QUANTITY |                                              |                    |
| VALVES:                                                     | 1-12" valve        | HEADER: # main headline                      | PIPE DIA. 12"sdr17 |
| VALVE STEMS:                                                |                    | STATION: 0+00-1+40                           | LINEAR FT. 140'    |
| LAND-TEC WELLHEADS:                                         |                    | HAR: _____                                   | TRENCH DEPTH 3'-5' |
| IN-LINE SUMPS:                                              |                    | HEADER: # _____                              | PIPE DIA. _____    |
| QED VAULT KITS:                                             |                    | STATION: _____                               | LINEAR FT. _____   |
| QED PUMPS:                                                  |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
| ENCASEMENTS:                                                |                    | HORIZONTAL: # _____                          | PIPE DIA. _____    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>6-man crew |                    | STATION: _____                               | LINEAR FT. _____   |
|                                                             |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                                             |                    | HORIZONTAL: # _____                          | PIPE DIA. _____    |
|                                                             |                    | STATION: _____                               | LINEAR FT. _____   |
|                                                             |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                                             |                    | HORIZONTAL: # _____                          | PIPE DIA. _____    |
|                                                             |                    | STATION: _____                               | LINEAR FT. _____   |
|                                                             |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                                             |                    | LATERAL: # _____                             | PIPE DIA. _____    |
|                                                             |                    | STATION: _____                               | LINEAR FT. _____   |
|                                                             |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                                             |                    | LATERAL: # _____                             | PIPE DIA. _____    |
|                                                             |                    | STATION: _____                               | LINEAR FT. _____   |
|                                                             |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                                             |                    | AIR & FM: # 2" & 4"                          | PIPE DIA. 9&11     |
|                                                             |                    | STATION: 0+00-1+40                           | LINEAR FT. 145'    |
|                                                             |                    | RISER HEIGHT: 5'                             | TRENCH DEPTH 3'-5' |

### COMMENTS (Description of Work Order Completed):

Today we started on header line starting at station 0+00 where we installed an 12x12 tee in exsisting line. We installed a 12" valve at station 0+04 and had to dig a mini sump hole because of leachate breakout which we filled with stone and installed a bentonite plug consisting of 12- 50lb. bags. We then continued on with header along with 2" air and 4" f.m. lines and at station 0+70 we installed tee's in all lines and connected with lateral from tues. We then started 24" c.m.p. for road crossing at station 0+75 and running to station 1+35, we continued to stion 1+40 where we ended for the day. We then installed all pipes thru c.m.p. and covered with brick topping. We then shut down for the day.

CLIENT REPRESENTATIVE

DATE

James Peck

12-12-13

AEGL SUPERINTENDENT

DATE

NAME & TITLE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/13/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                     |
|-----------------------------------------------|--------------------|----------------------------------------------|---------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                     |
| VALVES:                                       |                    | HEADER: # 12"headerline                      | PIPE DIA. 12"sdr17  |
| VALVE STEMS:                                  |                    | STATION: 1+40-3+70                           | LINEAR FT. 230'     |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH 3'-5'  |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.           |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.          |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.           |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.           |
|                                               |                    | STATION:                                     | LINEAR FT.          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                               |                    | LATERAL: #                                   | PIPE DIA.           |
|                                               |                    | STATION:                                     | LINEAR FT.          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                               |                    | LATERAL: #                                   | PIPE DIA.           |
|                                               |                    | STATION:                                     | LINEAR FT.          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                               |                    | LATERAL: #                                   | PIPE DIA.           |
|                                               |                    | STATION:                                     | LINEAR FT.          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                               |                    | AIR & FM: # along header                     | PIPE DIA. 2"and 4"  |
|                                               |                    | STATION: 1+40-3+70                           | LINEAR FT. 230' ea. |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3'-5'  |

### COMMENTS (Description of Work Order Completed):

Today after our safety meeting we continued on with headerline,airline and f.m. line all in common trench.We started at station 1+40 and continued on until station 3+04 where we installed a 12x6 reduced tee for lateral and also tee's in air and f.m. lines.We then went to station 3+70 where we ended for the day.We then confirmed grade and installed survey risers and caution tape and began to backfill.We also moved our 1,000 gallon fuel tank per request of site and built berm around tank.We spent the rest of the day cleaning and dressing up all worked areas.

CLIENT REPRESENTATIVE

DATE

James Peck

12-13-13

AEGL SUPERINTENDENT

DATE

NAME & TITLE





American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT# 2-13-145

DATE: 12/14/2013

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| START TIME <u>    </u> AM  |  |
| STOP TIME <u>    </u> PM   |  |

### COMMENTS (Description of Work Order Completed):

No work today due to weather.

CLIENT REPRESENTATIVE

DATE

James Peck

12-14-13

AEGL SUPERINTENDENT

DATE

NAME & TITLE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/15/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | HEADER: #                                    | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR & FM: #                                  | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| START TIME AM              |  |
| STOP TIME PM               |  |

### COMMENTS (Description of Work Order Completed):

No work sunday.

James Peck 12/15/13  
CLIENT REPRESENTATIVE DATE  
Ben A. Tolia CRA  
NAME & TITLE

James Peck 12-15-13  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/16/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                        |
|-----------------------------------------------|--------------------|----------------------------------------------|------------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                        |
| VALVES:                                       |                    | HEADER: # main header                        | PIPE DIA. 12"sdr17     |
| VALVE STEMS:                                  |                    | STATION: 3+70-5+20                           | LINEAR FT. 150'        |
| LAND-TEC WELL HEADS:                          |                    | HAR:                                         | TRENCH DEPTH 3'-5'     |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.              |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.             |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.              |
|                                               |                    | STATION:                                     | LINEAR FT.             |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | HORIZONTAL: #                                | PIPE DIA.              |
| 5-man crew                                    |                    | STATION:                                     | LINEAR FT.             |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.              |
|                                               |                    | STATION:                                     | LINEAR FT.             |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
|                                               |                    | LATERAL: #                                   | PIPE DIA.              |
|                                               |                    | STATION:                                     | LINEAR FT.             |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
|                                               |                    | LATERAL: #                                   | PIPE DIA.              |
|                                               |                    | STATION:                                     | LINEAR FT.             |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH           |
|                                               |                    | AIR & FM: # along headerline                 | PIPE DIA. 2"dr9&4"dr11 |
|                                               |                    | STATION: 3+70-5+20                           | LINEAR FT. 150'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3'-5'     |

### COMMENTS (Description of Work Order Completed):

Today we continued on with header after our morning safety meeting and peeling off layer of snow and ice from off road path. We started at station 3+70 and continued to station 5+17 where we installed tee's in all three lines for future lateral. We then confirmed grade and installed survey risers and caution tape and spent the remainder of the day backfilling.

James Peck 12/16/13  
CLIENT REPRESENTATIVE DATE

James Peck 12-16-13  
AEGL SUPERINTENDENT DATE

Ben A Todio CQA  
NAME & TITLE





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Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 12/17/2013

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT#: 2-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                          |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                          |
| VALVES:                                       |                    | HEADER: # main header                        | PIPE DIA. 12"sdr17       |
| VALVE STEMS:                                  |                    | STATION: 5+20-7+22                           | LINEAR FT. 202'          |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH 5'-7'       |
| IN-LINE SUMPS:                                |                    | HEADER: #                                    | PIPE DIA.                |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.               |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
| ENCASEMENTS:                                  |                    | HORIZONTAL: #                                | PIPE DIA.                |
|                                               |                    | STATION:                                     | LINEAR FT.               |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | HORIZONTAL: #                                | PIPE DIA.                |
| 6-man crew                                    |                    | STATION:                                     | LINEAR FT.               |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
|                                               |                    | HORIZONTAL: #                                | PIPE DIA.                |
|                                               |                    | STATION:                                     | LINEAR FT.               |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
|                                               |                    | LATERAL: #                                   | PIPE DIA.                |
|                                               |                    | STATION:                                     | LINEAR FT.               |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
|                                               |                    | LATERAL: #                                   | PIPE DIA.                |
|                                               |                    | STATION:                                     | LINEAR FT.               |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH             |
|                                               |                    | AIR & FM: # along header                     | PIPE DIA. 2"dr9 & 4"dr11 |
|                                               |                    | STATION: 5+20-7+22                           | LINEAR FT. 202'          |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 5'-7'       |

### COMMENTS (Description of Work Order Completed):

Today after our tailgate safety meeting ,we continued on 12" header with 2" air and 4"f.m.,we continued at station 5+20 and ran to station 7+22 where we will connect to blind flange on existing pipe.We also located existing 12" line which was deeper then thought.We will also have extra depth for the last 20' of trench because of it being at a 7'-9' cut.we then spent the rest of the day backfilling and dressing up all worked areas.

James A. Todio 12/17/13  
CLIENT REPRESENTATIVE DATE  
James A. Todio CQA  
NAME & TITLE

James Peck 12-17-13  
AEGL SUPERINTENDENT DATE



American  
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Group Ltd.

## AEGL DAILY DIARY

PROJECT NAME: Lorain Landfill  
CLIENT/PROJECT# 2-13-145

DATE: 12/18/2013

| MISC. INSTALLED ITEMS / Construction                        |                    | PIPELINE INSTALLATION DETAILS / Construction |                     |
|-------------------------------------------------------------|--------------------|----------------------------------------------|---------------------|
| INSTALLED ITEM                                              | INSTALLED QUANTITY |                                              |                     |
| VALVES:                                                     |                    | HEADER: #                                    | PIPE DIA.           |
| VALVE STEMS:                                                |                    | STATION:                                     | LINEAR FT.          |
| LAND-TEC WELLHEADS:                                         |                    | HAR:                                         | TRENCH DEPTH        |
| IN-LINE SUMPS:                                              |                    | HEADER: #                                    | PIPE DIA.           |
| QED VAULT KITS:                                             |                    | STATION:                                     | LINEAR FT.          |
| QED PUMPS:                                                  |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
| ENCASEMENTS:                                                |                    | HORIZONTAL: #                                | PIPE DIA.           |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>6-man crew |                    | STATION:                                     | LINEAR FT.          |
|                                                             |                    | RISER HEIGHT:                                | TRENCH DEPTH        |
|                                                             |                    | AIR & F.M. #                                 | PIPE DIA. 2" AND 4" |
|                                                             |                    | STATION: 0+00-0+12                           | LINEAR FT. 18'      |
|                                                             |                    | RISER HEIGHT: 6'                             | TRENCH DEPTH 3'     |
| WEATHER & TIME INFORMATION                                  |                    | LATERAL: #                                   | PIPE DIA. 6"SDR17   |
|                                                             |                    | STATION: 0+00-0+12                           | LINEAR FT. 18'      |
|                                                             |                    | RISER HEIGHT: 6'                             | TRENCH DEPTH 3'     |
| DAILY CONDITIONS: <u>cold</u>                               |                    | LATERAL: #                                   | PIPE DIA. 6"SDR17   |
|                                                             |                    | STATION: 0+00-0+59                           | LINEAR FT. 65'      |
|                                                             |                    | RISER HEIGHT: 6'                             | TRENCH DEPTH 3'     |
| START TIME <u>7:00a.m.</u>                                  |                    | AIR & FM: #                                  | PIPE DIA. 2" & 4"   |
|                                                             |                    | STATION: 0+00-0+59                           | LINEAR FT. 65'      |
|                                                             |                    | RISER HEIGHT: 6'                             | TRENCH DEPTH 3'     |
| STOP TIME <u>5:30p.m.</u>                                   |                    |                                              |                     |
|                                                             |                    |                                              |                     |
|                                                             |                    |                                              |                     |

### COMMENTS (Description of Work Order Completed):

Today after our safety meeting, we began by hauling fresh dirt so we could build a pad for the off road truck and excavator while trenching. We then trenched to future well # 329 running 12' with 6" lateral, 2" airline, and 4" f.m. line. We then did the same with future well # 328 running 59' with all three lines. We also installed steel 1" caps on the top of all air and f.m. risers. We also began air test on header and all connected laterals. We also hauled dirt for drillers and assisted building there pads. We spent the rest of the day backfilling and making fittings for future use.

James A. Todia 12/18/13  
CLIENT REPRESENTATIVE DATE  
James A. Todia CQA  
NAME & TITLE

James Peck 12-18-13  
AEGL SUPERINTENDENT DATE



American  
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## AEGL DAILY DIARY

DATE: 1/13/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>sloppy                   |                    |
| START TIME 4:00AM                             |                    |
| STOP TIME 2:30PM                              |                    |

|               |              |
|---------------|--------------|
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| HAR:          | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |

Today we started by driving back up to lorain and once we arrived on site we had our morning safety meeting and then went up on the hill and started fusing up fittings and put air test on 6" laterals . We put 3-400ft stringers with 90 risers on each ends and put air test at 25 psi for 4 hours. Once we had air testing all on we got with janet the QC and she checked air test. We also hauled dirt up to laterals for tomorrows work. Once we had dirt hauled we wrapped things up and left for the day.

CLIENT REPRESENTATIVE

NAME & TITLE

AEGL SUPERINTENDENT

DATE

1/13/2014



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT# 202-13-145

DATE: 1/14/2014

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| DAILY CONDITIONS:<br>rain                     |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| START TIME <u>7:00AM</u>                      |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| STOP TIME <u>8:00AM</u>                       |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

### COMMENTS (Description of Work Order Completed):

Today we didnt work do to all the rain and the sloppy conditions.

CLIENT REPRESENTATIVE

DATE

AEGL SUPERINTENDENT

DATE 2014

NAME & TITLE





**DATE:** 1/15/2014

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                       |
|-----------------------------------------------|--------------------|----------------------------------------------|-----------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                       |
| VALVES:                                       |                    | LATERAL: # EW-46R2                           | PIPE DIA. 6"          |
| VALVE STEMS:                                  |                    | STATION: 0+00 to 1+99                        | LINEAR FT. 199'       |
| LAND-TEC WELLHEADS:                           |                    | RISER HEIGHT: _____                          | TRENCH DEPTH 3' to 5' |
| IN-LINE SUMPS:                                |                    | LATERAL: # EW-45R3                           | PIPE DIA. 6"          |
| QED VAULT KITS:                               |                    | STATION: 0+00 to 1+62                        | LINEAR FT. 162'       |
| QED PUMPS:                                    |                    | RISER HEIGHT: _____                          | TRENCH DEPTH 3' to 5' |
| ENCASEMENTS:                                  |                    | LATERAL: # _____                             | PIPE DIA. _____       |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION: _____                               | LINEAR FT. _____      |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | LATERAL: # _____                             | PIPE DIA. _____       |
|                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | LATERAL: # _____                             | PIPE DIA. _____       |
|                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | FORCEMAIN: # _____                           | PIPE DIA. _____       |
|                                               |                    |                                              |                       |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | AIR: # _____                                 | PIPE DIA. _____       |
|                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | FORCEMAIN: # _____                           | PIPE DIA. _____       |
|                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                               |                    | _____                                        | _____                 |
|                                               |                    | _____                                        | _____                 |

WEATHER & TIME INFORMATION

DAILY CONDITIONS:

cold

START TIME 7:00AM

STOP TIME 6:15PM

PIPELINE INSTALLATION DETAILS / Construction

LATERAL: # EW-46R2

STATION: 0+00 to 1+99

RISER HEIGHT:

LATERAL: # EW-45R3

STATION: 0+00 to 1+62

RISER HEIGHT:

LATERAL: #

STATION:

RISER HEIGHT:

LATERAL: #

STATION:

RISER HEIGHT:

FORCEMAIN: #

STATION:

RISER HEIGHT:

FORCEMAIN: #

STATION:

RISER HEIGHT:

PIPE DIA. 6"

LINEAR FT. 199'

TRENCH DEPTH 3' to 5'

PIPE DIA. 6"

LINEAR FT. 162'

TRENCH DEPTH 3' to 5'

PIPE DIA.

LINEAR FT.

TRENCH DEPTH

PIPE DIA.

LINEAR FT.

TRENCH DEPTH

PIPE DIA.

LINEAR FT.

TRENCH DEPTH

PIPE DIA.

LINEAR FT.

TRENCH DEPTH

Today we started with our morning safety meeting and then went up on the hill and trenched in 6" lateral for remote well EW-46R2. Once trench was dug we then went over and installed 6" pipe in trench line. We started with a 6" 90 riser for remote wellhead for EW-46R2. We then feed 40ft of 18" cmp over 6" pipe for road crossing it started at 1+49 and ended at 1+89. We then went and installed a 6" tee into EW-46R2 and tied in 6" lateral to well. We then went over and trenched 6" lateral for remote well EW-45R3. Once we finished trenching we started installing 6" lateral in trench line we started with a 6" 90 riser for remote wellhead. We then also feed 18" cmp over 6" pipe for road crossing. We started road crossing for lateral at 1+06 and ended it at 1+46 a total of 40ft of 18" cmp. We then went down to EW-145R3 and installed a 8x6 tee into new well and tied in 6" lateral to well. We then shot all pipes at 5% or more grade so we started back filling trench lines. We set survey risers every 50ft and fittings and rolled caution tape down trench lines. We also put 8ft 4x4 wood post on each end of the 18" cmp road crossings. Once back filling was complete we cleaned out tracks on all equipment and wrapped things up for the day.

DATE \_\_\_\_\_

NAME &amp; TITLE

**AEGLE SUPERINTENDENT**

DATE \_\_\_\_\_



American  
Environmental  
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## AEGL DAILY DIARY

DATE: 1/16/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction                          |                    | PIPELINE INSTALLATION DETAILS / Construction |                       |
|---------------------------------------------------------------|--------------------|----------------------------------------------|-----------------------|
| INSTALLED ITEM                                                | INSTALLED QUANTITY |                                              |                       |
| VALVES:                                                       |                    | LATERAL: # EW-42R2                           | PIPE DIA. 6"          |
| VALVE STEMS:                                                  |                    | STATION: 0+00 to 1+30                        | LINEAR FT. 130'       |
| LAND-TEC WELLHEADS:                                           |                    | HAR: _____                                   | TRENCH DEPTH 3' to 5' |
| IN-LINE SUMPS:                                                |                    | LATERAL: # EW-303R                           | PIPE DIA. 6"          |
| QED VAULT KITS:                                               |                    | STATION: 0+00 to 1+02                        | LINEAR FT. 102'       |
| QED PUMPS:                                                    |                    | RISER HEIGHT: _____                          | TRENCH DEPTH 3' to 5' |
| ENCASEMENTS:                                                  |                    | LATERAL: # _____                             | PIPE DIA. _____       |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>80ft-12" CMP |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                                               |                    | LATERAL: # _____                             | PIPE DIA. _____       |
|                                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                                               |                    | LATERAL: # _____                             | PIPE DIA. _____       |
|                                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                                               |                    | HEADER: # _____                              | PIPE DIA. _____       |
|                                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                                               |                    | FORCEMAIN: # _____                           | PIPE DIA. _____       |
|                                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |
|                                                               |                    | AIR: # _____                                 | PIPE DIA. _____       |
|                                                               |                    | STATION: _____                               | LINEAR FT. _____      |
|                                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____    |

| WEATHER & TIME INFORMATION     |        |
|--------------------------------|--------|
| DAILY CONDITIONS:<br>cold/snow |        |
| START TIME                     | 7:00AM |
| STOP TIME                      | 6:30PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up and trenched on 6" lateral for remote well EW-42R2. Once we had trench dug we then installed 6" lateral in trench line and installed a 6" 90 riser for remote well head. We then feed 40ft of 12" cmp over 6" pipe for road crossing. Road crossing started at 0+46 and ended at 0+86. We then went and installed a 6" tee tee into well and tied in 6" lateral to port side of tee. We then went down and trenched 6" lateral for EW-303R. Once trench was dug we then installed 6" pipe in trench line and started with a 6" 90 riser for EW-303R. We then feed 40ft of 12" cmp over 6" pipe. We then ran pipe down to EW-307R and installed a 6" tee riser for tie in at a later time. We then shot in both laterals at 5% grade so we started back filling trench lines. We set survey risers every 50ft mark and fittings. Also rolled caution tape down trench lines. We also put 8ft 4x4 wood post at each end of the road crossings on top of the 12" cmp. While we were back filling trench lines we hauled dirt to make benches for laterals. Once all dirt was hauled and back filling was complete we wrapped things up and left for the day.

John Media 1/16/14  
CLIENT REPRESENTATIVE DATE

[Signature] 1/16/2014  
AEGL SUPERINTENDENT DATE

Don X Tedia COA  
NAME & TITLE



American  
Environmental  
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## AEGL DAILY DIARY

DATE: 1/17/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                           |
|-----------------------------------------------|--------------------|----------------------------------------------|---------------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                           |
| VALVES:                                       |                    | LATERAL: # EW-303R                           | PIPE DIA. 6"              |
| VALVE STEMS:                                  |                    | STATION: 1+02 to 1+05                        | LINEAR FT. 3'             |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH above ground |
| IN-LINE SUMPS:                                |                    | LATERAL: # EW-332                            | PIPE DIA. 6"              |
| QED VAULT KITS:                               |                    | STATION: 0+00 to 1+63                        | LINEAR FT. 163'           |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5'     |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.                 |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | AIR: #                                       | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | AIR: #                                       | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |
|                                               |                    | AIR: #                                       | PIPE DIA.                 |
|                                               |                    | STATION:                                     | LINEAR FT.                |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH              |

| WEATHER & TIME INFORMATION     |        |
|--------------------------------|--------|
| DAILY CONDITIONS:<br>cold/snow |        |
| START TIME                     | 7:00AM |
| STOP TIME                      | 5:15PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and started trenching on 6" lateral going to EW-332. While we were trenching we got with scs and had them isolate laterals for tie ins. Once they had pipe isolated we then went over and tied in 6" lateral for EW-303R. We made tie in with 6" 45 elbow and tie into existing lateral at EW-307R. We then went up and dug down 3ft around EW-303 and abandon well with 6" slip cap and lag screws. We also abandon existing 6" vacuum riser with 6" buttcap. We then went over and installed 6" lateral into trench line at EW-332. Once pipe was in trench line we went down and tied in lateral with a 6" tee into existing 6" lateral. Once tee was in line we welded a 6" 45 elbow on port side of tee and tied lateral to the 6" 45 elbow. We then shot in pipe and started back filling trench line. We set survey risers every 50ft mark and fittings. While we were back filling we hauled dirt to build benches for laterals. We then went up and abandon old remote wellhead risers at EW-42R, EW-45R2 and EW-46R with 6" slip caps and lag screws. We then went around and hooked up well heads at EW-42R2, EW-45R3, EW-46R2, EW-303R and EW-332. A total of 5 well heads. Once we finished back filling trench lines and abandonments we wrapped things up and left for the day.

James A. Todia 1/17/14  
CLIENT REPRESENTATIVE DATE

James A. Todia CQA  
NAME & TITLE

[Signature] 1/17/2014  
AEGL SUPERINTENDENT DATE



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## AEGL DAILY DIARY

DATE: 1/18/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>cold                     |                    |
| START TIME 7:00AM                             |                    |
| STOP TIME 2:00PM                              |                    |

|                       |                 |
|-----------------------|-----------------|
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HIEGHT:         | TRENCH DEPTH    |
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |
| AIR: # EW-42R2        | PIPE DIA. 2"    |
| STATION: 0+00 to 0+23 | LINEAR FT. 23'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| FORCEMAIN: # EW-42R2  | PIPE DIA. 3"    |
| STATION: 0+00 to 0+23 | LINEAR FT. 23'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| AIR: # EW-45R3        | PIPE DIA. 2"    |
| STATION: 0+00 to 0+24 | LINEAR FT. 24'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| FORCEMAIN: # EW-45R3  | PIPE DIA. 3"    |
| STATION: 0+00 to 0+24 | LINEAR FT. 24'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |

Today we started with our morning safety meeting and then went up on the hill and extend 2" air and 3" forcemain around EW-42R2 and EW-45R3. Once we dug around both wells and had trenches dug we then started by abandon old wells by filling wells up with dirt and then silicone a 6" slip caps on EW-42R and EW-45R2 with lag screws. We then extended the 2" air and 3" forcemain at existing risers at wells. We started with 90 risers for the 2" air and 3" forcemain at new wells and then pinched off existing risers and welded 90 elbows and then welded lines to 90 elbows at tie in points. While we were tying in lines we also hauled dirt for more benches to our 6" laterals. Once tie ins were complete we back filled trenches and set survey risers every fitting and 50ft marks. Once trenches were back filled we wrapped things up and left for the day.

Mark Kania 1/18/14  
CLIENT REPRESENTATIVE DATE  
Brian A Todia CQA  
NAME & TITLE

[Signature] 1/18/2014  
AEGL SUPERINTENDENT DATE





**DATE:** 1/19/2014

**PROJECT NAME:** Lorain County Landfill  
**CLIENT/PROJECT#** 202-13-145

## Today we didn't work

**CLIENT REPRESENTATIVE**

DATE \_\_\_\_\_

NAME &amp; TITLE

**AEGLE SUPERINTENDENT**

DATE \_\_\_\_\_



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## AEGL DAILY DIARY

DATE: 1/20/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction                             |                    |
|------------------------------------------------------------------|--------------------|
| INSTALLED ITEM                                                   | INSTALLED QUANTITY |
| VALVES:                                                          |                    |
| VALVE STEMS:                                                     |                    |
| LAND-TEC WELLHEADS:                                              |                    |
| IN-LINE SUMPS:                                                   |                    |
| QED VAULT KITS:                                                  |                    |
| QED PUMPS:                                                       |                    |
| ENCASEMENTS:                                                     |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below)<br>40ft of 18" CMP |                    |
| WEATHER & TIME INFORMATION                                       |                    |
| DAILY CONDITIONS:<br>cold/snow                                   |                    |
| START TIME 7:00AM                                                |                    |
| STOP TIME 6:00PM                                                 |                    |

|                       |                       |
|-----------------------|-----------------------|
| LATERAL: # EW-333     | PIPE DIA. 6"          |
| STATION: 0+00 to 4+00 | LINEAR FT. 400'       |
| HAR:                  | TRENCH DEPTH 3' to 5' |
| LATERAL: #            | PIPE DIA.             |
| STATION:              | LINEAR FT.            |
| RISER HEIGHT:         | TRENCH DEPTH          |
| LATERAL: #            | PIPE DIA.             |
| STATION:              | LINEAR FT.            |
| RISER HEIGHT:         | TRENCH DEPTH          |
| LATERAL: #            | PIPE DIA.             |
| STATION:              | LINEAR FT.            |
| RISER HEIGHT:         | TRENCH DEPTH          |
| FORCEMAIN: # EW-333   | PIPE DIA. 4"          |
| STATION: 0+00 to 4+00 | LINEAR FT. 400'       |
| RISER HEIGHT:         | TRENCH DEPTH 4' to 5' |
| AIR: # EW-333         | PIPE DIA. 2"          |
| STATION: 0+00 to 4+00 | LINEAR FT. 400'       |
| RISER HEIGHT:         | TRENCH DEPTH 3' to 5' |
| FORCEMAIN: #          | PIPE DIA.             |
| STATION:              | LINEAR FT.            |
| RISER HEIGHT:         | TRENCH DEPTH          |
| AIR: #                | PIPE DIA.             |
| STATION:              | LINEAR FT.            |
| RISER HEIGHT:         | TRENCH DEPTH          |

Today we started with our morning safety meeting and then went up on the hill and started trenching on 6" lateral starting at EW-333. While we were trenching we fused up pipe and fittings. We then started putting pipe in trench line we started by putting 6" 90 riser with 2" air and 4" forcemain risers at EW-333 0+00. We then ran pipe down to EW-331 and then installed a 6" tee risers with 2" air and 4" forcemain risers at 2+00 we then installed 40ft of 18" CMP for road crossing starting at 2+04 and ended at 2+44. Once CMP was in trench line we feed all 3 pipes through cmp and then went down to EW-330 and installed 6" tee riser with 2" air and 4" tee risers at 3+00 we then ran pipe down to tie in point. Once all pipes were in trench line and on grade we started back filling trench line. We set survey risers every 50 ft mark and fittings also rolled caution tape down trench line. We also set 4x4 post on each end of the road crossing. While we were finishing back filling we put air test on the 6" lateral at 25psi the 2"air at 100psi and the 4" forcemain at 50psi over night. Janet the QC came and checked air test. Once we had air test on and finished back filling trench line we wrapped thing up and left for the day.

Janet N Todia 1/20/14  
CLIENT REPRESENTATIVE

Janet N Todia CRA  
NAME & TITLE

Janet N Todia  
AEGL SUPERINTENDENT

1/20/2014  
DATE



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Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 1/21/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                       |
|-----------------------------------------------|--------------------|----------------------------------------------|-----------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                       |
| VALVES:                                       |                    | LATERAL: # EW-333                            | PIPE DIA. 6"          |
| VALVE STEMS:                                  |                    | STATION: 4+00 to 4+17                        | LINEAR FT. 17'        |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH 3' to 5' |
| IN-LINE SUMPS:                                |                    | LATERAL: # EW-334                            | PIPE DIA. 6"          |
| QED VAULT KITS:                               |                    | STATION: 0+00 to 1+00                        | LINEAR FT. 100'       |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
| ENCASEMENTS:                                  |                    | AIR: # EW-333                                | PIPE DIA. 2"          |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION: 4+00 to 4+17                        | LINEAR FT. 17'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | FORCEMAIN: # EW-333                          | PIPE DIA. 4"          |
|                                               |                    | STATION: 4+00 to 4+17                        | LINEAR FT. 17'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | AIR: # EW-334                                | PIPE DIA. 2"          |
|                                               |                    | STATION: 0+00 to 1+00                        | LINEAR FT. 100'       |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | FORCEMAIN: # EW-334                          | PIPE DIA. 4"          |
|                                               |                    | STATION: 0+00 to 1+00                        | LINEAR FT. 100'       |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | AIR: #                                       | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |

| WEATHER & TIME INFORMATION          |        |
|-------------------------------------|--------|
| DAILY CONDITIONS:<br>snow/Very cold |        |
| START TIME                          | 7:00AM |
| STOP TIME                           | 5:30PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and dug up tie in point for lateral coming from EW-333. While we were digging up tie in we had to go over and dig up around where EW-327 and make repair do to the fact the drill bucket got into 6" pipe. Once we had pipe exposed we then cut out bad pipe and fused in new pipe to lateral. Once we had repair made we then went over and tied in lateral coming from EW-33. We started by installing a 12x6 tee into existing 12" header. We fused one side of the tee in and then did a 12" flange to flange connection on the other side after connection was bolted up we then tied in 6" lateral from EW-333 to the port side of the tee. We then cut into the existing 2" air and 4" forcemain and installed tees and tied in pipes coming from EW-333 to the port side of the tees. Once tie in was complete we then went over to EW-334 and trenched lateral down to tie in point we started by installing 6" 90 riser along with 2" air and 4" forcemain risers at 0+00 and then installed pipe in trench line. Once all pipe was on grade and in trench we then started back filling trench line and tie in point. We set survey risers every 50ft mark and fittings also rolled caution tape down trench line. While we were finishing back filling we went over and put air test on pipes at EW-334. We put 25 psi on the 6" 100psi on the 2" air and 50 psi on the forcemain over night Janet the QC came over and checked air test. Once air test was on and back filling was complete we wrapped things up and left for the day.

14  
1/21/2014  
CLIENT REPRESENTATIVE DATE

1/21/2014  
NAME & TITLE

1/21/2014  
AEGL SUPERINTENDENT DATE 2014



American  
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## AEGL DAILY DIARY

DATE: 1/22/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT# 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                       |
|-----------------------------------------------|--------------------|----------------------------------------------|-----------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                       |
| VALVES:                                       |                    | LATERAL: # EW-334                            | PIPE DIA. 6"          |
| VALVE STEMS:                                  |                    | STATION: 1+00 to 1+33                        | LINEAR FT. 33'        |
| LAND-TEC WELLHEADS:                           |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
| IN-LINE SUMPS:                                |                    | LATERAL: # EW-173                            | PIPE DIA. 6"          |
| QED VAULT KITS:                               |                    | STATION: 0+00 to 1+30                        | LINEAR FT. 130'       |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
| ENCASEMENTS:                                  |                    | AIR: # EW-334                                | PIPE DIA. 2"          |
|                                               |                    | STATION: 1+00 to 1+33                        | LINEAR FT. 33'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | FORCEMAIN: # EW-334                          | PIPE DIA. 4"          |
|                                               |                    | STATION: 1+00 to 1+33                        | LINEAR FT. 33'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | AIR: # EW-46R2                               | PIPE DIA. 2"          |
|                                               |                    | STATION: 0+00 to 0+33                        | LINEAR FT. 33'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    | FORCEMAIN: # EW-46R2                         | PIPE DIA. 3"          |
|                                               |                    | STATION: 0+00 to 0+33                        | LINEAR FT. 33'        |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
|                                               |                    |                                              |                       |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
| DAILY CONDITIONS:                             |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
| Snow/Very cold                                |                    |                                              |                       |
| START TIME 7:00AM                             |                    |                                              |                       |
| STOP TIME 5:30PM                              |                    |                                              |                       |

Today we started with our morning safety meeting and then went up and dug up 12" tie in for EW-334. While we were digging up tie in we went over and trenched 6" lateral for EW-173. Once trench was dug we set 6" lateral in trench and then back filled trench line. We set survey risers every 50ft mark and rolled caution tape down trench line. We then went over and started 12" tie in. We started by installing a 12x6 tee into existing 12" header. We fused one side of the tee and then made a 12" flange to flange connection on the other side. Once we had the 12" flange connection bolted up we welded 6" lateral to port side of the tee. Once lateral was tied in we then installed 2" and 4" tees into the existing air and forcemain. Once we had the air and forcemain tie in complete we back filled tie in point. While we were back filling we went up to EW-46R2 and extended the 2" air and 3" forcemain over to well. Once we dug around old EW-46R we cut old well and slip capped and lag screwed well below grade. We then installed 2" and 3" 90 elbows and tied in laterals to existing riser pipes. We the installed 90 risers at EW-46R2. Once we had air and forcemain extended to new well we back filled trench line. We the went over and cut out 6" jumper line going from EW-50R2,EW-321 and EW-54R2. We also cut out 6" valve at EW-54R2 and butt capped tees at EW-54R2 and EW-321. We then went up and abandon EW-50R with a 6" slip cap with lag screws And abandon 6" vacuum riser with 6" butt cap. We also had to abandon the old 2" air at EW-50R with 2" butt cap. Once we had abandonment complete we went over and put air test on 6" lateral at EW-173 at 25psi. Janet the QC came over and checked air test. Once air test was on and all holes and laterals were back filled we unloaded trucks and wrapped things up for the day.

Janet A. Toia 1/22/14  
CLIENT REPRESENTATIVE DATE

Janet A. Toia 1/22/2014  
AEGL SUPERINTENDENT DATE

Janet A Toia CQA  
NAME & TITLE





American  
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## AEGL DAILY DIARY

DATE: 1/23/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                       |
|-----------------------------------------------|--------------------|----------------------------------------------|-----------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                       |
| VALVES:                                       |                    | LATERAL: # EW-173                            | PIPE DIA. 6"          |
| VALVE STEMS:                                  |                    | STATION: 1+30 to 1+60                        | LINEAR FT. 30'        |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH 3' to 5' |
| IN-LINE SUMPS:                                |                    | LATERAL: # EW-172                            | PIPE DIA. 6"          |
| QED VAULT KITS:                               |                    | STATION: 0+00 to 1+13                        | LINEAR FT. 113'       |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' to 5' |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.             |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | LATERAL: #                                   | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | LATERAL: #                                   | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | HEADER: #                                    | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |
|                                               |                    | AIR: #                                       | PIPE DIA.             |
|                                               |                    | STATION:                                     | LINEAR FT.            |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH          |

| WEATHER & TIME INFORMATION     |         |
|--------------------------------|---------|
| DAILY CONDITIONS:<br>very cold |         |
| START TIME                     | 7:00AM  |
| STOP TIME                      | 5:00 PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and trenched up tie in point for EW-173. While we were digging up tie in point we went up and fabbed up 6" lateral for EW-172 and put lateral on air test. We put 6" pipe on air test at 25psi for 4 hours. Janet came up and checked air test and passed air test. While air test was on we then went down and tie in lateral for EW-173. We started by installing a 12x6 tee into existing 12" header. We welded one side of the tee in and then did a 12" flange to flange connection. Once we welded flange on we then bolted up the 12" flange to flange connection. Once tee was bolted up we then tie in 6" lateral coming from Ew-173. Once tie in was finished we then back filled tie in point and lateral. We then went over and trenched on 6" lateral for EW-172. Once we started trench we then got with Janet and Chris and changed tie in point for lateral. Instead of tie in point being at the 12" header we went down to EW-327 and tie into existing 6" vacuum riser at EW-327. Once trench was dug we then set lateral in trench line and tie in lateral at EW-327. We started by installing a 6" tee into existing riser and then tie in lateral to the port side of the tee. Once tie in was complete we then back filled trench line. We set survey risers every 50ft mark and fittings. While we were back filling trench line we also hauled dirt and started doing final dress up work on other lateral. We then wrapped things up and left for the day.

Janet A. Todia 1/23/14  
CLIENT REPRESENTATIVE DATE

Janet A. Todia COA  
NAME & TITLE

John B. Kill 1/23/2013 21  
AEGL SUPERINTENDENT DATE 2014



American  
Environmental  
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## AEGL DAILY DIARY

DATE: 1/24/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION          |        |
|-------------------------------------|--------|
| DAILY CONDITIONS:<br>Very very cold |        |
| START TIME                          | 7:00AM |
| STOP TIME                           | 8:00AM |

### COMMENTS (Description of Work Order Completed):

Today we didn't work do to how cold it is.

Paul M. Kelly 1/24/14  
CLIENT REPRESENTATIVE DATE

James A. Todio CPA  
NAME & TITLE

[Signature] 1/24/2014  
AEGL SUPERINTENDENT DATE



**DATE:** 1/25/2014

[illegible]

|                     |                    |
|---------------------|--------------------|
| LATERAL: # _____    | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HIEGHT: _____ | TRENCH DEPTH _____ |
| LATERAL: # _____    | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| LATERAL: # _____    | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| LATERAL: # _____    | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| AIR: # _____        | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| FORCEMAIN: # _____  | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| AIR: # _____        | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| FORCEMAIN: # _____  | PIPE DIA. _____    |
| STATION: _____      | LINEAR FT. _____   |
| RISER HEIGHT: _____ | TRENCH DEPTH _____ |

**Today we didn't work to the fact it was snowing way to hard.**

  
 CLIENT REPRESENTATIVE

1/25/14  
 DATE

JAMES A TOLIDI CQA  
 NAME & TITLE

  
AEGL SUPERINTENDENT

1/25/2014  
DATE



**DATE:** 1/26/2014

| MISC. INSTALLED ITEMS / Construction          |                    |               |              |
|-----------------------------------------------|--------------------|---------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |               |              |
| VALVES:                                       |                    | LATERAL: #    | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:      | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | RISER HIEGHT: | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #    | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:      | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT: | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #    | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | LATERAL: #    | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | AIR: #        | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #  | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
| WEATHER & TIME INFORMATION                    |                    | AIR: #        | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #  | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | AIR: #        | PIPE DIA.    |
|                                               |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #  | PIPE DIA.    |
| DAILY CONDITIONS:                             |                    | STATION:      | LINEAR FT.   |
|                                               |                    | RISER HEIGHT: | TRENCH DEPTH |
| START TIME _____                              |                    |               |              |
|                                               |                    |               |              |
| STOP TIME _____                               |                    |               |              |

Today we didn't work

*James K. Pollock* 11/26/14  
CLIENT REPRESENTATIVE DATE  
*Isnot A Todia CPA*  
NAME & TITLE

 1/26/2014  
AEGL SUPERINTENDENT DATE





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## AEGL DAILY DIARY

DATE: 1/27/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                                |
|-----------------------------------------------|--------------------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY             |
| VALVES:                                       | 2" and 4" stainless ballvalves |
| VALVE STEMS:                                  |                                |
| LAND-TEC WELLHEADS:                           |                                |
| IN-LINE SUMPS:                                |                                |
| QED VAULT KITS:                               |                                |
| QED PUMPS:                                    |                                |
| ENCASEMENTS:                                  |                                |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                                |
|                                               |                                |
| WEATHER & TIME INFORMATION                    |                                |
| DAILY CONDITIONS:<br>cold/snow                |                                |
| START TIME 8:00AM                             |                                |
| STOP TIME 1:00PM                              |                                |

|               |              |
|---------------|--------------|
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| HAR:          | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |

Today we started with our morning safety meeting and then Chris asked us if we could install the 2" air and 4" isolation valves on the north east side of the landfill that they added on to the job. So we only brought in half the crew to install isolation valve. We started by dig up tie in pipe. While we were digging up tie in point we fabbed up parts and bolted up valves. Once we had the existing 2" air and 4" forcemain up around the 24" header we then pinched off pipes and installed the 2" air and 4" force main isolation valves. Once we had valves installed we then back filled around valves and put 4x4 post on each side of the valves for extra support for the valves. We had at total of 5hrs at T&M rate. We use 1-320 hoe, 1-725 truck, 2-operators, 2labors and a supervisor. Once tie in was completely back filled we wrapped things up and left for the day.

John Whelan 1/27/14  
CLIENT REPRESENTATIVE  
Scott A Tadio CQA  
NAME & TITLE

[Signature] 1/27/2014  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 1/28/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION          |  |
|-------------------------------------|--|
| DAILY CONDITIONS:<br>very very cold |  |
| START TIME _____                    |  |
| STOP TIME _____                     |  |

### COMMENTS (Description of Work Order Completed):

Today we didn't work to the extreme cold weather.

Mr. M. L. L. L. 1/28/14  
CLIENT REPRESENTATIVE DATE

Donat & Ladio CPA  
NAME & TITLE

[Signature] 1/28/2014 71  
AEGL SUPERINTENDENT DATE 2014



|                        |                               |
|------------------------|-------------------------------|
| <b>PROJECT NAME:</b>   | <u>Lorain County Landfill</u> |
| <b>CLIENT/PROJECT#</b> | 202-13-145                    |

Today we didn't work do to the extreme cold weather.

  
 CLIENT REPRESENTATIVE

1/29/14  
 DATE

  
 NAME & TITLE

Brent A. Radio CMA  
NAME & TITLE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 1/30/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                                      | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY                   |                                              |              |
| VALVES:                                       | 2-2" and 1-4" stainless steel valves | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                                      | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           | 7-EW334,333,331,330,173,172 & 329    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                                      | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                                      | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                                      | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                                      | LATERAL: #                                   | PIPE DIA.    |
|                                               |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                                      | LATERAL: #                                   | PIPE DIA.    |
|                                               |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                                      | HEADER: #                                    | PIPE DIA.    |
|                                               |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                                      | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                                      | AIR: #                                       | PIPE DIA.    |
|                                               |                                      | STATION:                                     | LINEAR FT.   |
|                                               |                                      | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |        |
|----------------------------|--------|
| DAILY CONDITIONS:<br>cold  |        |
| START TIME                 | 7:00AM |
| STOP TIME                  | 5:00PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and fabled up 2" air and 4" forcemain isolation valves. While we were digging up air and forcemain pipes on the north slope we also dug around on the east slope to locate air and forcemain to put in isolation valve on the 2" air. Once pipes in both locations were dug up we then went back on the north slope and installed 2" air and 4" forcemain isolation valves. Once valves were installed we back filled around isolation valves. We set 4x4 wood post on each side of the valves for extra support. We then installed a 2" air isolation valve where the site wants it to help them isolate the air line so they can find air leak in the 2" air line. We then went up and put wellheads on EW-334,333,331,330,173,172 and 329 a total of 7 wellheads. While we were putting wellheads on we went up and pre built all pumps to drop in wells and rock sump. Once pumps were built and wellheads were on we wrapped things up and left site for the day.

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

AEGL SUPERINTENDENT

DATE 2014





## AEGL DAILY DIARY

DATE: 1/31/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                                   | PIPELINE INSTALLATION DETAILS / Construction |                 |
|-----------------------------------------------|-----------------------------------|----------------------------------------------|-----------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY                |                                              |                 |
| VALVES:                                       |                                   | LATERAL: # EW-51R3                           | PIPE DIA. 6"    |
| VALVE STEMS:                                  |                                   | STATION: 0+00 to 0+18                        | LINEAR FT. 18'  |
| LAND-TEC WELLHEADS:                           | 4-EW-51R3,EW-151R,EW-327 & EW-328 | HAR:                                         | TRENCH DEPTH 3' |
| IN-LINE SUMPS:                                |                                   | LATERAL: # EW-151R                           | PIPE DIA. 6"    |
| QED VAULT KITS:                               | 3-6"                              | STATION: 0+00 to 0+17                        | LINEAR FT. 17'  |
| QED PUMPS:                                    | 3                                 | RISER HEIGHT:                                | TRENCH DEPTH 3' |
| ENCASEMENTS:                                  |                                   | AIR: # EW-151R                               | PIPE DIA. 2"    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                                   | STATION: 0+00 to 0+17                        | LINEAR FT. 17'  |
|                                               |                                   | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                                   | FORCEMAIN: # EW-151R                         | PIPE DIA. 2"    |
|                                               |                                   | STATION: 0+00 to 0+17                        | LINEAR FT. 17'  |
|                                               |                                   | RISER HEIGHT:                                | TRENCH DEPTH 3' |
| WEATHER & TIME INFORMATION                    |                                   | LATERAL: # Rock sump                         | PIPE DIA. 6"    |
|                                               |                                   | STATION: 0+00 to 0+63                        | LINEAR FT. 63'  |
|                                               |                                   | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                                   | FORCEMAIN: # Rock Sump                       | PIPE DIA. 4"    |
|                                               |                                   | STATION: 0+00 to 0+32                        | LINEAR FT. 32'  |
| DAILY CONDITIONS:<br>cold                     |                                   | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                                   | AIR: # Rock Sump                             | PIPE DIA. 2"    |
|                                               |                                   | STATION: 0+00 to 0+32                        | LINEAR FT. 32'  |
| START TIME 7:00AM                             |                                   | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                                   |                                              |                 |
| STOP TIME 6:00PM                              |                                   |                                              |                 |
|                                               |                                   |                                              |                 |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and started trenching. We started by digging on 6" lateral at EW-51R3. Once trench was finished we set 6" pipe in trench and got the ok from SCS so we tied in pipe to existing 6" vacuum riser at old well with a 6" 90 elbow and a 90 riser at new well. We then also abandon old well EW-51R2 with a 6" slip cap with silicone and lag screws. We then went over and trenched lateral for EW-151. Once trench was dug we put 6" pipe in trench and tied into existing 6" riser with 6" 90 elbow and a 6" 90 riser at EW-151R. We then tied into the existing 2" air and 2" forcemain with 90 elbows and 90 risers at EW-151R. We then abandoned old well EW-151 with a 8" slip cap with silicone and lag screws. We then went down to the rock sump and trenched 6" lateral and also a trench for the 2" air and 4" forcemain. Once trenching was complete we started by installing a 6" tee into the rock sump and then put a 6" 90 riser at EW-55R for remote wellhead. We then went over to the 12" valve and installed 2" and 4" tees and tied pipes to port side of tees and put pipes in trench line and installed 2" and 4" 90 risers at rock sump. We then went up and extend the 2" air and 4" forcemain at EW-328. Once pipes were extended we put wellheads on EW-151R,EW-51R3, EW-328, EW-327 and rock sump total of 5 wellheads. We then also dropped pumps at EW-327- pump depth 23ft S/N#4-11-879, EW-151R- pump depth 97ft S/N#4-11890 and the rock sump- pump depth 24ft S/N# 4-11882. Once pumps were all hooked up we back filled trench lines and also did dress up work. We then wrapped things up and left for the day.

John M. Bolca 1/31/14  
CLIENT REPRESENTATIVE DATE

James A. Todie CPA  
NAME & TITLE

[Signature] 1/31/2014  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 2/1/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>cold/rain                |                    |
| START TIME 7:00AM                             |                    |
| STOP TIME 2:00PM                              |                    |

|               |              |
|---------------|--------------|
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HIEGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |

Today we started with our morning safety meeting and then went up on the hill and put air test on the 2" air and 4" forcemain that runs with the 12" header. We put the 4" forcemain on at 50psi for 4hrs. The 2" air however wasnt holding air so we started looking for air leak once we found leak we fixed the pipe and put it back on air test at 100psi. We then went up and abandon H-18S with a 6" buttcap on the vacuum riser and a 6" slip cap with lag screws on 6" riser for H-18S. We cleaned up all pipe and fittings and took everything to the boneyard. We also took pumps and pump kits and stuck them in SCS building. While we were cleaning up we hauled dirt and did some dress up work. Once we had everything down to the boneyard we wrapped things up and left for the day.

Michael 2/1/14  
CLIENT REPRESENTATIVE DATE  
Bert A Todia CDA  
NAME & TITLE

[Signature] 2/1/2014  
AEGL SUPERINTENDENT DATE



DATE: 2/2/2014

**PROJECT NAME:** Lorain County Landfill

**CLIENT/PROJECT#** 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |                  |              |  |
|-----------------------------------------------|--------------------|------------------|--------------|--|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                  |              |  |
| VALVES:                                       |                    | LATERAL: #       | PIPE DIA.    |  |
| VALVE STEMS:                                  |                    | STATION:         | LINEAR FT.   |  |
| LAND-TEC WELLHEADS:                           |                    | RISER HIEGHT:    | TRENCH DEPTH |  |
| IN-LINE SUMPS:                                |                    | LATERAL: #       | PIPE DIA.    |  |
| QED VAULT KITS:                               |                    | STATION:         | LINEAR FT.   |  |
| QED PUMPS:                                    |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
| ENCASEMENTS:                                  |                    | LATERAL: #       | PIPE DIA.    |  |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:         | LINEAR FT.   |  |
|                                               |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
|                                               |                    | AIR: #           | PIPE DIA.    |  |
|                                               |                    | STATION:         | LINEAR FT.   |  |
|                                               |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
|                                               |                    | FORCEMAIN: #     | PIPE DIA.    |  |
|                                               |                    | STATION:         | LINEAR FT.   |  |
|                                               |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
|                                               |                    | AIR: #           | PIPE DIA.    |  |
|                                               |                    | STATION:         | LINEAR FT.   |  |
| DAILY CONDITIONS:                             |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
|                                               |                    | FORCEMAIN: #     | PIPE DIA.    |  |
|                                               |                    | STATION:         | LINEAR FT.   |  |
|                                               |                    | RISER HEIGHT:    | TRENCH DEPTH |  |
|                                               |                    | START TIME _____ |              |  |
|                                               |                    | STOP TIME _____  |              |  |

**Today we didn't work**

*Paula* 2/2/14  
CLIENT REPRESENTATIVE DATE  
*Donna A. Tadi* CQA  
NAME & TITLE

  
\_\_\_\_\_  
AEGL SUPERINTENDENT

2/2/2014  
\_\_\_\_\_  
DATE





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Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 2/17/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
|                                               |                    |
|                                               |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>cold                     |                    |
| START TIME 7:00AM                             |                    |
| STOP TIME 4:00PM                              |                    |

|               |              |
|---------------|--------------|
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| HAR:          | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |

Today we traveled back up to lorain for liner repairs and abandonment like the site wants us to do. Once we arrived back on site we dropped trailer off and went up on the cap and expsoed around 7 wells down to liner and clean around wells for abandonments. Once we finished digging around wells we wrapped things up and left for the day.

Don A Todia 2/17/14  
CLIENT REPRESENTATIVE

Don A Todia CWA  
NAME & TITLE

Jack Back II 2/17/2014  
AEGL SUPERINTENDENT DATE



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Group Ltd.

## AEGL DAILY DIARY

DATE: 2/18/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT# 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION     |  |
|--------------------------------|--|
| DAILY CONDITIONS:<br>snow/cold |  |
| START TIME _____               |  |
| STOP TIME _____                |  |

### COMMENTS (Description of Work Order Completed):

Today we didn't work do to the fact of all the snow and we couldn't weld liner.

Justin Mokej 2/18/14  
CLIENT REPRESENTATIVE DATE

Jack Bach 97 2/18/2014  
AEGL SUPERINTENDENT DATE

Brian A. Todor CRJA  
NAME & TITLE



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## AEGL DAILY DIARY

DATE: 2/19/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.   |
| DAILY CONDITIONS:<br>wet and very sloppy      |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| START TIME 6:30AM                             |                    | AIR: #                                       | PIPE DIA.    |
| STOP TIME 6:15PM                              |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

Today we started with our morning safety and then went up on the west slope and started well abandonments and liner repairs. We abandoned wells EW-227, EW-101R, EW-225, EW-228, EW-226 and EW-140. First we started by cutting well below liner and then filled in wells with dirt and then 2ft of bentonite to top of well and then slip capped and lag screws. Once wells were abandoned we then made liner repairs. We spent a total of 11.5 hrs on liner repairs due to the fact of the melting snow and all the water coming in the hole. Once we had liner repairs were done we then back filled holes and wrapped things up for the day.

NOTE: Liner testing was performed and Janet the QC passed all testing.

Janet A. Tolia 2/19/14  
CLIENT REPRESENTATIVE DATE  
Janet A. Tolia CQA  
NAME & TITLE

Jack Back 2/19/2014  
AEGL SUPERINTENDENT DATE



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## AEGL DAILY DIARY

DATE: 2/20/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HEADER: #                                    | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |         |
|----------------------------|---------|
| DAILY CONDITIONS:<br>Rain  |         |
| START TIME                 | 6:30AM  |
| STOP TIME                  | 10:00AM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went to the west slope and abandoned EW-224. We started by cutting well down below liner and then filling well up with dirt and then the last 2ft with bentonite. We the put 6" slip cap with lag screws on well. We then made liner repair. We spent a total of 3.5 hours on repair do to the fact of the wet and sloppy conditions. Once liner was repaired we then back filled hole. Once back filling was complete we wrapped things up do to the fact of its raining.

Note: Janet the QC checked and passed all liner testing

Janet A. Todia 2/20/14  
CLIENT REPRESENTATIVE DATE

Janet A. Todia CQA  
NAME & TITLE

Jack Back 2/20/2014  
AEGL SUPERINTENDENT DATE



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## AEGL DAILY DIARY

DATE: 2/21/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | WEATHER & TIME INFORMATION                   |              |
| DAILY CONDITIONS:                             |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| START TIME _____                              |                    |                                              |              |
| STOP TIME _____                               |                    |                                              |              |

Today we didnt work do to the fact of aqll the rain and melting snow. However Bob and Kevin went out and got with the site and do to the fact of all the melting snow and water problems we will have with the liner repairs we shut down for the weekend and start back up on monday

*John A. Todio* 2/21/14  
CLIENT REPRESENTATIVE DATE

*John Sack* 2/21/2014  
AEGL SUPERINTENDENT DATE

*John A. Todio CQA*  
NAME & TITLE



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Group Ltd.

## AEGL DAILY DIARY

DATE: 2/22/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| OED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| OED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| DAILY CONDITIONS:                             |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| START TIME _____                              |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| STOP TIME _____                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |

### COMMENTS (Description of Work Order Completed):

Today we didnt work

Paula India 2/22/14  
CLIENT REPRESENTATIVE DATE  
Bert A To Lis CQA  
NAME & TITLE

Jack Back M 2/22/2014  
AEGL SUPERINTENDENT DATE



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## AEGL DAILY DIARY

DATE: 2/23/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HEADER: #                                    | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| START TIME                 |  |
| STOP TIME                  |  |

### COMMENTS (Description of Work Order Completed):

Today we didnt work

James A. Todaro 2/23/14  
CLIENT REPRESENTATIVE DATE  
James A. Todaro CQA  
NAME & TITLE

Jack Buck 2/23/2014  
AEGL SUPERINTENDENT DATE





American  
Environmental  
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## AEGL DAILY DIARY

DATE: 2/24/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>cold                     |                    |
| START TIME 7:00AM                             |                    |
| STOP TIME 5:30PM                              |                    |

|               |              |
|---------------|--------------|
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| HAR:          | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| LATERAL: #    | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| FORCEMAIN: #  | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |
| AIR: #        | PIPE DIA.    |
| STATION:      | LINEAR FT.   |
| RISER HEIGHT: | TRENCH DEPTH |

Today we started with our morning safety meeting and then went up on the east slope and started digging under liner trying to find the existing 24" header. Once we went down 13ft and about 20ft wide we still couldnt find the 24" header. So we then got with the site and they had us abandon hole so we back filled hole. After hole was back filled we made liner repair patch. Liner was tested and passed by Janet the QC. Once liner repair was complete we then went down and exposed the 24" header and where it goes under liner. The site wants us to run all new 24" header and 2" air and 4x2 dual contain forcemain on the east slope. So we then got measurements and what fittings we will need to do the job. Once we had measurements and a plan for the new header line we wrapped things up and left for the day.

Note: we had 3 labors /1 Operator/ 1 Supervisor and 1-18ton JCB truck and a cat 320 Hoe for 10.5hrs at T&M RATE

Janet A. Todia 2/24/14  
CLIENT REPRESENTATIVE

Janet A. Todia CQA  
NAME & TITLE

[Signature] 2/24/2014  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 2/25/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION     |         |
|--------------------------------|---------|
| DAILY CONDITIONS:<br>snow/cold |         |
| START TIME                     | 7:00AM  |
| STOP TIME                      | 11:30AM |

### COMMENTS (Description of Work Order Completed):

Today we came in and went to the boneyard and pulled out all pipe and fittings that we need for the new 24" header system on the east slope. Once we had all fittings and pipe up on top of the hill we wrapped things up and left for the day.

Jeff Medina 2/25/14  
CLIENT REPRESENTATIVE DATE

Brian A. Todio CQA  
NAME & TITLE

[Signature] 2/25/2014  
AEGL SUPERINTENDENT DATE



**DATE:** 2/26/2014

**PROJECT NAME:** Lorain County Landfill  
**CLIENT/PROJECT#** 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                    |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                    |
| VALVES:                                       |                    | LATERAL: # _____                             | PIPE DIA. _____    |
| VALVE STEMS:                                  |                    | STATION: _____                               | LINEAR FT. _____   |
| LAND-TEC WELLHEADS:                           |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
| IN-LINE SUMPS:                                |                    | LATERAL:# _____                              | PIPE DIA. _____    |
| QED VAULT KITS:                               |                    | STATION: _____                               | LINEAR FT. _____   |
| QED PUMPS:                                    |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
| ENCASEMENTS:                                  |                    | AIR: # _____                                 | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | AIR: # _____                                 | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
| WEATHER & TIME INFORMATION                    |                    | AIR: # _____                                 | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
| DAILY CONDITIONS:<br>cold/snow                |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
| START TIME 6:30AM                             |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
| STOP TIME 6:15PM                              |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN:# _____                            | PIPE DIA. _____    |
|                                               |                    | STATION: _____                               | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____                          | TRENCH DEPTH _____ |

Today we started with our morning safety meeting and then went over to the north slope and hauled dirt up to the 12" header so we could build a bench and dig up existing 12" header pipe to regrade pipe. Once bench was built we then went over and started digging up 12" header once we had around 100ft of the pipe open we shot in pipe we found that pipe had a belly in it so we put pipe on grade and then got with SCS and they checked wells and vacuum got better. We then got with Chris and we are going to leave pipe open over night so SCS can check it tomorrow to make sure that the belly was the only problem. So we then Wrapped things up and left for the day.

**Note: we had 3 labors/1 operator and 1 supervisor/ 1-18ton JCB truck and 1-320E cat hoe for a total of 7hrs at T&M RATE**

**CLIENT REPRESENTATIVE**

DATE \_\_\_\_\_

**AEGLE SUPERINTENDENT**

DATE \_\_\_\_\_

NAME &amp; TITLE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 2/27/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HEADER: #                                    | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| snow                       |  |
| START TIME                 |  |
| STOP TIME                  |  |

### COMMENTS (Description of Work Order Completed):

Today we didn't work

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

AEGL SUPERINTENDENT

DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 2/28/2014

PROJECT NAME: Lorain County Landfill

CLIENT/PROJECT# 202-13-111

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
| DAILY CONDITIONS:                             |                    | STATION:                                     | LINEAR FT.   |
| Cold                                          |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| START TIME 7:00AM                             |                    | FORCEMAIN: #                                 | PIPE DIA.    |
| STOP TIME 4:15PM                              |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

Today we started with our morning safety meeting and then went up and started fusing up 6", 4" 2" and 3" pipe. Once pipe was fused up the 24" machine and generator showed up so we went and unloaded machines and set up machine and started fusing up 24" pipe. Due to the cold weather we had a very hard time getting generator to run. While we were fusing pipe we went over on the north slope and back filled 12" header that we dug up on Wednesday. Once back filling was complete we wrapped things up and left for the day.

Joe A. Tolio 2/28/14  
CLIENT REPRESENTATIVE DATE

Joe A. Tolio CQA  
NAME & TITLE

[Signature] 2/28/2014  
AEGL SUPERINTENDENT DATE





American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 3/1/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-111

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
| WEATHER & TIME INFORMATION                    |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
| DAILY CONDITIONS:<br>cold                     |                    | STATION:                                     | LINEAR FT.   |
| START TIME 7:00AM                             |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| STOP TIME 12:00PM                             |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and fused up all the 24" pipe up. Once we finished fusing up pipe we wrapped things up and left for the day.

Don't Media 3/1/14  
CLIENT REPRESENTATIVE DATE

Don't A to do CQA  
NAME & TITLE

[Signature] 3/1/2014  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 3/2/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | LATERAL: #                                   | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | LATERAL: #                                   | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | HEADER: #                                    | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
| STATION:                                      | LINEAR FT.         |                                              |              |
| RISER HEIGHT:                                 | TRENCH DEPTH       |                                              |              |
| AIR: #                                        | PIPE DIA.          |                                              |              |
| STATION:                                      | LINEAR FT.         |                                              |              |
| RISER HEIGHT:                                 | TRENCH DEPTH       |                                              |              |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| START TIME                 |  |
| STOP TIME                  |  |

### COMMENTS (Description of Work Order Completed):

Today we didnt work

Paul Madia 3/2/14  
CLIENT REPRESENTATIVE DATE  
Anna A Tojiz CQA  
NAME & TITLE

Paul B. G. 3/2/2014  
AEGL SUPERINTENDENT DATE





**DATE:** 3/3/2014

**CLIENT/PROJECT#** 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    |                     |                    |
|-----------------------------------------------|--------------------|---------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                     |                    |
| VALVES:                                       |                    | LATERAL: # _____    | PIPE DIA. _____    |
| VALVE STEMS:                                  |                    | STATION: _____      | LINEAR FT. _____   |
| LAND-TEC WELLHEADS:                           |                    | HAR: _____          | TRENCH DEPTH _____ |
| IN-LINE SUMPS:                                |                    | LATERAL: # _____    | PIPE DIA. _____    |
| QED VAULT KITS:                               |                    | STATION: _____      | LINEAR FT. _____   |
| QED PUMPS:                                    |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| ENCASEMENTS:                                  |                    | LATERAL: # _____    | PIPE DIA. _____    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | LATERAL: # _____    | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| WEATHER & TIME INFORMATION                    |                    | FORCEMAIN: # _____  | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | AIR: # _____        | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
| DAILY CONDITIONS:<br>cold                     |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | FORCEMAIN: # _____  | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | AIR: # _____        | PIPE DIA. _____    |
| START TIME 7:00AM                             |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | AIR: # _____        | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
| STOP TIME 6:00PM                              |                    | AIR: # _____        | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |
|                                               |                    | RISER HEIGHT: _____ | TRENCH DEPTH _____ |
|                                               |                    | AIR: # _____        | PIPE DIA. _____    |
|                                               |                    | STATION: _____      | LINEAR FT. _____   |

Today we started with our morning safety meeting and then went up and started digging up well abandonments and liner repairs. We started by digging up EW-121R but do to all the water coming in we couldn't repair liner so we left hole open and went over and abandoned EW-87R, EW-90R, EW-94R, EW-79R and EW-164R. We started by exposing around risers and once we had abandonments open we cut liner and dug down below liner and cut pipe and filled old wells up with dirt and then put 4ft of bentonite at top of pipe. We then slipped cap old wells below liner and then filled in hole. We then made liner repairs Once liner repairs were complete we wrapped things up and left for the day. We spent a total of 11hrs on digging up and making repairs on liner and abandonments.

Paula Roda 3/13/14  
CLIENT REPRESENTATIVE

Janet A Toia CQA  
NAME & TITLE

  
EGL SUPERINTENDENT

3/3/2014



American  
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## AEGL DAILY DIARY

DATE: 3/4/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-13-145

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |              |
|-----------------------------------------------|--------------------|----------------------------------------------|--------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |              |
| VALVES:                                       |                    | LATERAL: #                                   | PIPE DIA.    |
| VALVE STEMS:                                  |                    | STATION:                                     | LINEAR FT.   |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.    |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.   |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH |
| ENCASEMENTS:                                  |                    | AIR: #                                       | PIPE DIA.    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |
|                                               |                    | AIR: #                                       | PIPE DIA.    |
|                                               |                    | STATION:                                     | LINEAR FT.   |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH |

| WEATHER & TIME INFORMATION |        |
|----------------------------|--------|
| DAILY CONDITIONS:<br>cold  |        |
| START TIME                 | 7:00AM |
| STOP TIME                  | 3:45PM |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the west slope and finished well abandonments and liner repairs. We first started with EW-121R we open up hole more wide so water would drain away and then had to use bags of bentonite and made a dam around liner repair. We then made liner repair and back filled hole. We then went and dug around EW-71R and EW-74R. Once abandonments was exposed we cut thru liner and dug down and cut old wells below liner and then filled wells up with dirt and then finished filling well up with 4ft of bentonite. Once wells were filled we then slip capped wells below liner and then filled hole in with dirt. Once holes were filled in we then made liner repairs around abandonments. We spent a total of 5hrs on abandonments and liner repairs. Once liner repairs were complete we went up top and fabbed up 24" tees and pipe. Once we finished fabbing some stuff up we wrapped things up and left for the day.

*[Signature]* 3/4/14  
CLIENT REPRESENTATIVE DATE

*[Signature]* CQA  
NAME & TITLE

*[Signature]* 3/4/2014  
AEGL SUPERINTENDENT DATE



American  
Environmental  
Group Ltd.

## AEGL DAILY DIARY

DATE: 3/31/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-14-111

| MISC. INSTALLED ITEMS / Construction          |                    |
|-----------------------------------------------|--------------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |
| VALVES:                                       |                    |
| VALVE STEMS:                                  |                    |
| LAND-TEC WELLHEADS:                           |                    |
| IN-LINE SUMPS:                                |                    |
| QED VAULT KITS:                               |                    |
| QED PUMPS:                                    |                    |
| ENCASEMENTS:                                  |                    |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    |
| WEATHER & TIME INFORMATION                    |                    |
| DAILY CONDITIONS:<br>clear/sloppy muddy       |                    |
| START TIME 7:00AM                             |                    |
| STOP TIME 5:30PM                              |                    |

|                       |                 |
|-----------------------|-----------------|
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| HAR:                  | TRENCH DEPTH    |
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |
| LATERAL: #            | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |
| AIR: # EW-316         | PIPE DIA. 2"    |
| STATION: 0+00 to 0+15 | LINEAR FT. 15'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| FORCEMAIN: # EW-316   | PIPE DIA. 2"    |
| STATION: 0+00 to 0+15 | LINEAR FT. 15'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| AIR: # EW-317         | PIPE DIA. 2"    |
| STATION: 0+00 to 0+67 | LINEAR FT. 67'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| FORCEMAIN: # EW-317   | PIPE DIA. 2"    |
| STATION: 0+00 to 0+67 | LINEAR FT. 67'  |
| RISER HEIGHT:         | TRENCH DEPTH 3' |
| AIR: #                | PIPE DIA.       |
| STATION:              | LINEAR FT.      |
| RISER HEIGHT:         | TRENCH DEPTH    |

Today we started with our morning safety meeting and then went up on the hill and finished trenching on 24" header. Once trenching was complete we then tied into the 24" 90 elbow with 24" EFC and tied in 24" header to 90. We then started hauling dirt and back filled trench line and tie in point. We set survey risers every 50ft mark and fittings. We then went over by the open face and started running 2" air and forcemain lines up the hill away from the active face. We ran laterals up the hill for EW-317 and EW-316. We tied pipe into existing 2" air and forcemain with tees and ran them both up the hill and buttcap pipe and buried them. We set survey riser on pipe and finished back filling trench lines. Once all back filling was complete we wrapped things up and left for the day.

CLIENT REPRESENTATIVE

NAME & TITLE

AEGL SUPERINTENDENT

DATE

3/31/2014



American  
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Group Ltd.

## AEGL DAILY DIARY

DATE: 4/1/2014

PROJECT NAME: Lorain County Landfill  
CLIENT/PROJECT#: 202-14-111

| MISC. INSTALLED ITEMS / Construction          |                    | PIPELINE INSTALLATION DETAILS / Construction |                 |
|-----------------------------------------------|--------------------|----------------------------------------------|-----------------|
| INSTALLED ITEM                                | INSTALLED QUANTITY |                                              |                 |
| VALVES:                                       |                    | LATERAL: # EW-51R3                           | PIPE DIA. 6"    |
| VALVE STEMS:                                  |                    | STATION: 0+00 to 2+57                        | LINEAR FT. 257' |
| LAND-TEC WELLHEADS:                           |                    | HAR:                                         | TRENCH DEPTH 3' |
| IN-LINE SUMPS:                                |                    | LATERAL: #                                   | PIPE DIA.       |
| QED VAULT KITS:                               |                    | STATION:                                     | LINEAR FT.      |
| QED PUMPS:                                    |                    | RISER HEIGHT:                                | TRENCH DEPTH    |
| ENCASEMENTS:                                  |                    | AIR: # EW-51R3                               | PIPE DIA. 3"    |
|                                               |                    | STATION: 0+00 to 2+57                        | LINEAR FT. 257' |
| MISC. ITEMS / EXTRA DETAIL: (Described Below) |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                    | FORCEMAIN: # EW-51R3                         | PIPE DIA. 2"    |
|                                               |                    | STATION: 0+00 to 2+57                        | LINEAR FT. 257' |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH 3' |
|                                               |                    | AIR: #                                       | PIPE DIA.       |
|                                               |                    | STATION:                                     | LINEAR FT.      |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH    |
|                                               |                    | FORCEMAIN: #                                 | PIPE DIA.       |
|                                               |                    | STATION:                                     | LINEAR FT.      |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH    |
|                                               |                    | AIR: #                                       | PIPE DIA.       |
|                                               |                    | STATION:                                     | LINEAR FT.      |
|                                               |                    | RISER HEIGHT:                                | TRENCH DEPTH    |

| WEATHER & TIME INFORMATION |  |
|----------------------------|--|
| DAILY CONDITIONS:          |  |
| clear/ muddy               |  |
| START TIME 7:00AM          |  |
| STOP TIME 5:00PM           |  |

### COMMENTS (Description of Work Order Completed):

Today we started with our morning safety meeting and then went up on the hill and started trenching on 6" lateral going from EW-50R3 to EW-51R3. While we were trenching we fused up laterals and put them on air test. We put 25psi on the 6" lateral, 50psi on the 2" forcemain and 100psi on the 3" air for 4hrs. Janet the Qc checked testing and passed air test so we made tie in at EW-50R3. We fused in tee risers for all pipe at EW-50R3 and then ran pipe up to EW-51R3. we then installed 90 risers on all 3 pipes at EW-51R3. We then abandon old vacuum riser at EW-51R3 with 6" buttcap and then re hooked up existing wellhead to new lateral. We then shot in pipe it all had 3% or more grade so we started hauling dirt and back filled trench line. We set survey risers every 50ft mark and fittings. While we worked on lateral Bob went over on the north end of our new 24" header and dug up tie in point so we can tie header in tomorrow. Once all back filling was complete we wrapped thing up and left for the day.

Janet A. Todia 4/1/14  
CLIENT REPRESENTATIVE DATE

Janet A. Todia CQA  
NAME & TITLE

Janet A. Todia 4/1/2014  
AEGL SUPERINTENDENT DATE



**AEGL DAILY DIARY**

DATE: 4/2/2014

|                 |                        |
|-----------------|------------------------|
| PROJECT NAME:   | Lorain County Landfill |
| CLIENT/PROJECT# | 202-14-111             |

[illegible]

Today we started with our morning safety meeting and then went up on the hill and started tie in with the 24" header pipe. We started by getting with SCS to isolate existing 24" header. Once pipe was isolated we then cut 24" header pipe and removed pipe and cut into liner and abandon existing 24" header with 24" buttcap with a 24" EFC and 4x2 forcemain and 2" air with butt caps below liner. Once abandonment we complete we then put liner down and made liner repair. Testing was done by Rico and Passed by Janet the QC. Once liner repair was completely made we then put 24" pipe in trench and made 24" flange weld to existing pipe. Once flange was on we then made flange to flange bolt up connections. Once connection was made we then fused in 6" lateral for EW-30. We then also installed 2" air isolation valve at tie in point. We then shot in header pipe it all had 3% or more grade so we then back filled tie in point and lateral. While we were doing tie in we also had a couple of guys up on top of the hill fusing up 6" pipe. Once back filling was complete we cleaned up all tool and unloaded trucks and wrapped thing up for the day.

*Jessie M. Ladd* 4/12/14  
CLIENT REPRESENTATIVE DATE  
*Jessie M. Ladd CPA*  
NAME & TITLE

  
AEGL SUPERINTENDENT

4/2/2014  
DATE









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Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: December 14, 2013

Start Time 1:30AM End Time 9:00AM Total Hrs. 7.5

| DRILLING                                                                                                                                                                     |                                     | Owned Equipment                           |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------|
| 0                                                                                                                                                                            | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles _____   |
| 0                                                                                                                                                                            | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles _____  |
|                                                                                                                                                                              |                                     |                                           | Total Miles _____   |
| 0                                                                                                                                                                            | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. _____    |
| 0                                                                                                                                                                            | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. _____   |
|                                                                                                                                                                              |                                     |                                           | Total Hrs. _____    |
| 0                                                                                                                                                                            | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. _____    |
|                                                                                                                                                                              |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. _____   |
|                                                                                                                                                                              |                                     |                                           | Total Hrs. <u>0</u> |
|                                                                                                                                                                              |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. _____    |
|                                                                                                                                                                              |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. _____   |
|                                                                                                                                                                              |                                     |                                           | Total Hrs. <u>0</u> |
| COMPLETION                                                                                                                                                                   |                                     |                                           |                     |
| <u>WELL #</u>                                                                                                                                                                | <u>VF</u>                           |                                           |                     |
| _____                                                                                                                                                                        | _____                               |                                           |                     |
| _____                                                                                                                                                                        | _____                               |                                           |                     |
| _____                                                                                                                                                                        | _____                               |                                           |                     |
| _____                                                                                                                                                                        | _____                               |                                           |                     |
| _____                                                                                                                                                                        | _____                               |                                           |                     |
| COMMENTS                                                                                                                                                                     |                                     | Rental Equipment                          |                     |
| We traveled from Troy, Pa to Lorain Co. landfill. We left at 1:30AM. We arrived at 7:30AM. We dropped our trailer. Unloaded the bucket and hole covers. Left site at 9:00AM. |                                     | Rental Company <u>CAT</u>                 | Start Hrs. _____    |
|                                                                                                                                                                              |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. _____   |
|                                                                                                                                                                              |                                     | Equipment Type <u>316E</u>                | Total Hrs. _____    |
|                                                                                                                                                                              |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                     |
|                                                                                                                                                                              |                                     | Rental Company _____                      | Start Hrs. _____    |
|                                                                                                                                                                              |                                     | Location _____                            | Ending Hrs. _____   |
|                                                                                                                                                                              |                                     | Equipment Type _____                      | Total Hrs. <u>0</u> |
|                                                                                                                                                                              |                                     | Unit # _____                              |                     |
|                                                                                                                                                                              |                                     | Rental Company _____                      | Start Hrs. _____    |
|                                                                                                                                                                              |                                     | Location _____                            | Ending Hrs. _____   |
| Equipment Type _____                                                                                                                                                         | Total Hrs. <u>0</u>                 |                                           |                     |
| Unit # _____                                                                                                                                                                 |                                     |                                           |                     |

12/14/13  
CLIENT REPRESENTATIVE DATE  
Ismael A Tadia CBA  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

12/14/2013  
DATE



American  
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## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: December 16, 2013

Start Time 6:30AM End Time 3:00PM Total Hrs. 0.3

| DRILLING                                                                                                                                       |                                     | Owned Equipment                           |                                |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|--------------------------------|
| 0                                                                                                                                              | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>          </u>  |
| 0                                                                                                                                              | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>          </u> |
| 0                                                                                                                                              | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>          </u>  |
| 0                                                                                                                                              | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>          </u>   |
| 0                                                                                                                                              | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>          </u>  |
|                                                                                                                                                |                                     |                                           | Total Hrs. <u>          </u>   |
| <b>COMPLETION</b>                                                                                                                              |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>          </u>   |
| <u>WELL #</u>                                                                                                                                  | <u>VF</u>                           | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>          </u>  |
| <u>          </u>                                                                                                                              | <u>          </u>                   |                                           | Total Hrs. <u>          0</u>  |
| <u>          </u>                                                                                                                              | <u>          </u>                   | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>          </u>   |
| <u>          </u>                                                                                                                              | <u>          </u>                   | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>          </u>  |
| <u>          </u>                                                                                                                              | <u>          </u>                   |                                           | Total Hrs. <u>          0</u>  |
| <b>COMMENTS</b>                                                                                                                                |                                     | <b>Rental Equipment</b>                   |                                |
| We arrived on site at 6:30AM. Had our safety meeting. We built wells and hauled fill for completion. We left site at 3:00PM. No drill rig yet. |                                     | Rental Company <u>CAT</u>                 | Start Hrs. <u>          </u>   |
|                                                                                                                                                |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>          </u>  |
|                                                                                                                                                |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>          </u>   |
|                                                                                                                                                |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                                |
|                                                                                                                                                |                                     | Rental Company <u>          </u>          | Start Hrs. <u>          </u>   |
|                                                                                                                                                |                                     | Location <u>          </u>                | Ending Hrs. <u>          </u>  |
|                                                                                                                                                |                                     | Equipment Type <u>          </u>          | Total Hrs. <u>          0</u>  |
|                                                                                                                                                |                                     | Unit # <u>          </u>                  |                                |
|                                                                                                                                                |                                     | Rental Company <u>          </u>          | Start Hrs. <u>          </u>   |
|                                                                                                                                                |                                     | Location <u>          </u>                | Ending Hrs. <u>          </u>  |
|                                                                                                                                                |                                     | Equipment Type <u>          </u>          | Total Hrs. <u>          0</u>  |
|                                                                                                                                                |                                     | Unit # <u>          </u>                  |                                |

John A. Todid 12/16/13  
CLIENT REPRESENTATIVE DATE  
John A. Todid CQA  
NAME & TITLE

Eric V Steen 12/16/2013  
AEGL SITE SUPERVISOR DATE



## Drill Crew Daily Report

|                      |              |
|----------------------|--------------|
| <b>SUPERVISOR:</b>   | Eric V Steen |
| <b>PROJECT NAME:</b> | Lorain Co.   |
| <b>PROJECT #:</b>    | 10-113-130   |

**DATE:** December 17, 2013

|                   |               |                 |               |                   |            |
|-------------------|---------------|-----------------|---------------|-------------------|------------|
| <b>Start Time</b> | <b>6:30AM</b> | <b>End Time</b> | <b>3:00PM</b> | <b>Total Hrs.</b> | <b>8.5</b> |
|-------------------|---------------|-----------------|---------------|-------------------|------------|

| DRILLING                                                                                                                                                                                                                                                                                                          |                                     | Owned Equipment  |                   |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------|-------------------|--------------|
| 0                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF DRILLING             | Equipment #      | 7281 / 7235       | Start Miles  |
| 0                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / | Pick Up / Trailer | Ending Miles |
| 0                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF WELL COMPLETION      |                  |                   | Total Miles  |
| 0                                                                                                                                                                                                                                                                                                                 | How many benches built              | Equipment #      | 130DNXQ1445       | Start Hrs.   |
| 0                                                                                                                                                                                                                                                                                                                 | # Of Safety Grates Installed        | Equipment Type   | Drill Rig         | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     |                  |                   | Total Hrs.   |
| COMPLETION                                                                                                                                                                                                                                                                                                        |                                     | Equipment #      | CAT0953DPLBP01212 | Start Hrs.   |
| WELL #                                                                                                                                                                                                                                                                                                            | VF                                  | Equipment Type   | Track Loader      | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     |                  |                   | Total Hrs. 0 |
|                                                                                                                                                                                                                                                                                                                   |                                     | Equipment #      | JCB718ATC70832203 | Start Hrs.   |
|                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type   | Hual Truck        | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     |                  |                   | Total Hrs. 0 |
| COMMENTS                                                                                                                                                                                                                                                                                                          |                                     | Rental Equipment |                   |              |
| We arrived on site at 6:30AM. Had our safety meeting. We built wells and hauled fill for completion. The drill rig arrived on site at 12:30PM. I tracked the rig to the top near our working area. Put the bucket on. Greased drill as well. Set up on EW-42R2 to drill tomorrow morning. We left site at 3:00PM. |                                     | Rental Company   | CAT               | Start Hrs.   |
|                                                                                                                                                                                                                                                                                                                   |                                     | Location         | OHIO CAT          | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type   | 316E              | Total Hrs.   |
|                                                                                                                                                                                                                                                                                                                   |                                     | Unit #           | CAT0316EEDZW01016 |              |
|                                                                                                                                                                                                                                                                                                                   |                                     | Rental Company   |                   | Start Hrs.   |
|                                                                                                                                                                                                                                                                                                                   |                                     | Location         |                   | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type   |                   | Total Hrs. 0 |
|                                                                                                                                                                                                                                                                                                                   |                                     | Unit #           |                   |              |
|                                                                                                                                                                                                                                                                                                                   |                                     | Rental Company   |                   | Start Hrs.   |
|                                                                                                                                                                                                                                                                                                                   |                                     | Location         |                   | Ending Hrs.  |
|                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type   |                   | Total Hrs. 0 |
|                                                                                                                                                                                                                                                                                                                   |                                     | Unit #           |                   |              |

Jessie M. Bledsoe 12/17/13  
CLIENT REPRESENTATIVE DATE  
Tina A. Todis CQA  
NAME & TITLE

**Eric V Steen**  
**AEGL SITE SUPERVISOR**

12/17/2013  
DATE



# Drill Crew Daily Report

**SUPERVISOR:** Eric V Steen  
**PROJECT NAME:** Lorain Co.  
**PROJECT #:** 10-113-130

**DATE:** December 18, 2013

**Start Time** 6:00AM **End Time** 5:30AM **Total Hrs.** 11.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Owned Equipment                                  |                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------|----------------------------------|
| 147'                                                                                                                                                                                                                                                                                                                                                                                                                   | LINEAR FEET OF DRILLING             | <b>Equipment #</b> <u>7281 / 7235</u>            | <b>Start Miles</b> <u>26512</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                      | LINEAR FEET OF DRILLING-ABANDONMENT | <b>Equipment Type /</b> <u>Pick Up / Trailer</u> | <b>Ending Miles</b> <u>26534</u> |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  | <b>Total Miles</b> <u>22</u>     |
| 147'                                                                                                                                                                                                                                                                                                                                                                                                                   | LINEAR FEET OF WELL COMPLETION      | <b>Equipment #</b> <u>130DNXQ1445</u>            | <b>Start Hrs.</b> <u>5033</u>    |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                      | How many benches built              | <b>Equipment Type</b> <u>Drill Rig</u>           | <b>Ending Hrs.</b> <u>5043</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  | <b>Total Hrs.</b> <u>10</u>      |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                      | # Of Safety Grates Installed        | <b>Equipment #</b> <u>CAT0953DPLBP01212</u>      | <b>Start Hrs.</b> <u>2066</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Equipment Type</b> <u>Track Loader</u>        | <b>Ending Hrs.</b> <u>2076</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  | <b>Total Hrs.</b> <u>10</u>      |
| <b>COMPLETION</b>                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | <b>Equipment #</b> <u>JCB718ATC70832203</u>      | <b>Start Hrs.</b> <u>2032</u>    |
| <b>WELL #</b>                                                                                                                                                                                                                                                                                                                                                                                                          | <b>VF</b>                           | <b>Equipment Type</b> <u>Hual Truck</u>          | <b>Ending Hrs.</b> <u>2042</u>   |
| <u>EW-42R2</u>                                                                                                                                                                                                                                                                                                                                                                                                         | <u>108'</u>                         |                                                  | <b>Total Hrs.</b> <u>10</u>      |
| <u>EW-329</u>                                                                                                                                                                                                                                                                                                                                                                                                          | <u>39'</u>                          |                                                  |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                                  |                                  |
| <b>COMMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Rental Equipment</b>                          |                                  |
| <p>We arrived on site at 6:30AM. Had our safety meeting. Started drilling on EW-42R2 at 6:45PM. Finished to depth at 12:45PM. I then set up and started drilling on EW-329 at 1:20PM while Gregg and Tim set the well casing and completed. Finished drilling at 3:00PM. Set the well casing and completed. Loaded all trash out. Dressed up both wells. Fueled and greased the drill rig. We left site at 5:30PM.</p> |                                     | <b>Rental Company</b> <u>CAT</u>                 | <b>Start Hrs.</b> <u>162</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Location</b> <u>OHIO CAT</u>                  | <b>Ending Hrs.</b> <u>172</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Equipment Type</b> <u>316E</u>                | <b>Total Hrs.</b> <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Unit #</b> <u>CAT0316EEDZW01016</u>           |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Rental Company</b> _____                      | <b>Start Hrs.</b> _____          |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Location</b> _____                            | <b>Ending Hrs.</b> _____         |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Equipment Type</b> _____                      | <b>Total Hrs.</b> <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Unit #</b> _____                              |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Rental Company</b> _____                      | <b>Start Hrs.</b> _____          |
|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | <b>Location</b> _____                            | <b>Ending Hrs.</b> _____         |
| <b>Equipment Type</b> _____                                                                                                                                                                                                                                                                                                                                                                                            | <b>Total Hrs.</b> <u>0</u>          |                                                  |                                  |
| <b>Unit #</b> _____                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                                                  |                                  |

John A. Lichia 12/18/13  
**CLIENT REPRESENTATIVE** **DATE**  
Janet A. Tadzio CQA  
**NAME & TITLE**

Eric V Steen 12/18/2013  
**AEGL SITE SUPERVISOR** **DATE**



# Drill Crew Daily Report

**SUPERVISOR:** Eric V Steen  
**PROJECT NAME:** Lorain Co.  
**PROJECT #:** 10-113-130

**DATE:** December 19, 2013

**Start Time** 6:00AM **End Time** 3:30PM **Total Hrs.** 9.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Owned Equipment                           |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 129'                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>26973</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                       | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>26990</u> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                           | Total Miles <u>17</u>     |
| 129'                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5043</u>    |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                       | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5052</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                           | Total Hrs. <u>9</u>       |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                       | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2076</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2087</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                           | Total Hrs. <u>11</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2042</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2055</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                           | Total Hrs. <u>13</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     | Rental Equipment                          |                           |
| <u>WELL #</u>                                                                                                                                                                                                                                                                                                                                                                                                                                           | <u>VF</u>                           | Rental Company <u>CAT</u>                 | Start Hrs. <u>172</u>     |
| <u>EW-328</u>                                                                                                                                                                                                                                                                                                                                                                                                                                           | <u>40'</u>                          | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>181</u>    |
| <u>EW-45R3</u>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>89'</u>                          | Equipment Type <u>316E</u>                | Total Hrs. <u>9</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     | Unit #                                    |                           |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                                           |                           |
| <p>We arrived on site at 6:00AM. Had our safety meeting then set up and started drilling on EW-328 at 6:45AM. Finished drilling at 8:00AM. I set the well casing then began drilling on EW-45R3 at 8:35AM while Gregg and Tim completed EW-328. We finished drilling at a 89' bore depth due to a obstruction at 1:20PM. We set the 8" well casing. Loaded all trash out and completed EW-45R3. We fueled and greased the rig. Left site at 3:30PM.</p> |                                     |                                           |                           |

Eric V Steen 12/19/13  
 CLIENT REPRESENTATIVE DATE  
Eric A Tadio CQA  
 NAME & TITLE

Eric V Steen 12/19/2013  
 AEGL SITE SUPERVISOR DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 13, 2014

Start Time 6:30AM End Time 12:00PM Total Hrs. 5.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                  |                                     | Owned Equipment                           |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 0                                                                                                                                                                                                                                                                                                                                                                                         | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28305</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                         | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28340</u> |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     |                                           | Total Miles <u>35</u>     |
| 0                                                                                                                                                                                                                                                                                                                                                                                         | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5056</u>    |
| 2                                                                                                                                                                                                                                                                                                                                                                                         | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5059</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     |                                           | Total Hrs. <u>3</u>       |
| 0                                                                                                                                                                                                                                                                                                                                                                                         | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2087</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2090</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     |                                           | Total Hrs. <u>3</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2060</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2065</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     |                                           | Total Hrs. <u>5</u>       |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                |                                     | Rental Equipment                          |                           |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                    | VF                                  | Rental Company <u>CAT</u>                 | Start Hrs. <u>185</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>190</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>5</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Unit #                                    |                           |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                  |                                     |                                           |                           |
| <p>We arrived on site at 6:30AM. We had our safety meeting. Started all equipment up. The site is a mess due to high temperatures and rain again. Bob cut the haul road so we were able to haul fill for benching. We cut open and removed three fence stakes on the east slope for access to EW-332. Built benches for EW-50R3 and EW-333. We greased the rig. Left site at 12:00PM.</p> |                                     |                                           |                           |

Sancti A Todia CRA  
CLIENT REPRESENTATIVE  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/13/2014  
DATE





American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 14, 2014

Start Time 7:00AM End Time 6:30PM Total Hrs. 11.5

| DRILLING                                                                                                                                                                                                                                                                                                                                    |                                     | Owned Equipment                           |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 115'                                                                                                                                                                                                                                                                                                                                        | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28340</u>  |
| 0                                                                                                                                                                                                                                                                                                                                           | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28363</u> |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           | Total Miles <u>23</u>     |
| 115'                                                                                                                                                                                                                                                                                                                                        | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5065</u>    |
| 0                                                                                                                                                                                                                                                                                                                                           | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5075</u>   |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           | Total Hrs. <u>10</u>      |
| 0                                                                                                                                                                                                                                                                                                                                           | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2090</u>    |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2093</u>   |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           | Total Hrs. <u>3</u>       |
| COMPLETION                                                                                                                                                                                                                                                                                                                                  |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2065</u>    |
| WELL # <u>EW-46R2</u>                                                                                                                                                                                                                                                                                                                       | VF <u>115'</u>                      | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2075</u>   |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                             |                                     |                                           |                           |
| COMMENTS                                                                                                                                                                                                                                                                                                                                    |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 7:00AM. Had a safety meeting. Started fusing pipe. Bob cut our haul road for access. I began drilling on EW-46R2 at 8:15AM. Finished drilling to depth 115' at 4:03PM. We set the well casing and completed. Fueled and greased rig. Cleaned tracks out on all iron. Loaded tools up then left site at 6:30PM.</p> |                                     | Rental Company <u>CAT</u>                 | Start Hrs. <u>190</u>     |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>200</u>    |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Rental Company _____                      | Start Hrs. _____          |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Location _____                            | Ending Hrs. _____         |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Equipment Type _____                      | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Unit # _____                              |                           |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Rental Company _____                      | Start Hrs. _____          |
|                                                                                                                                                                                                                                                                                                                                             |                                     | Location _____                            | Ending Hrs. _____         |
| Equipment Type _____                                                                                                                                                                                                                                                                                                                        | Total Hrs. <u>0</u>                 |                                           |                           |
| Unit # _____                                                                                                                                                                                                                                                                                                                                |                                     |                                           |                           |

CLIENT REPRESENTATIVE

DATE

Eric V Steen

AEGL SITE SUPERVISOR

1/14/2014

DATE

NAME & TITLE





American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 15, 2014

Start Time 6:00AM End Time 5:00PM Total Hrs. 11.0

| DRILLING                                                                                                                                                                                                                                                                                                                      |                                     | Owned Equipment                           |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 111'                                                                                                                                                                                                                                                                                                                          | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28945</u>  |
| 0                                                                                                                                                                                                                                                                                                                             | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28975</u> |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Miles <u>30</u>     |
| 111'                                                                                                                                                                                                                                                                                                                          | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5075</u>    |
| 2                                                                                                                                                                                                                                                                                                                             | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5085</u>   |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
| 0                                                                                                                                                                                                                                                                                                                             | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2090</u>    |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2100</u>   |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2275</u>    |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2285</u>   |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                    |                                     | Rental Equipment                          |                           |
| WELL #                                                                                                                                                                                                                                                                                                                        | VF                                  | Rental Company                            |                           |
| EW-303R                                                                                                                                                                                                                                                                                                                       | 111'                                | Location                                  | <u>CAT</u>                |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type                            | <u>OHIO CAT</u>           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Unit #                                    | <u>316E</u>               |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | <u>CAT0316EEDZW01016</u>  |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Start Hrs. <u>190</u>     |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Ending Hrs. <u>200</u>    |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                               |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Location                                  |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type                            |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Start Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Ending Hrs. <u>0</u>      |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                               |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Location                                  |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type                            |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Start Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Ending Hrs. <u>0</u>      |
|                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>0</u>       |
| COMMENTS                                                                                                                                                                                                                                                                                                                      |                                     |                                           |                           |
| We arrived on site at 6:00AM. Fired up our iron. Had a safety meeting. Started drilling on EW-303R 7:05AM. Finished EW-303R to depth at 1:50PM. We set the well casing. completed and loaded all trash out to working phase. Dressed up EW-303R. Hauled fill for two benches. Greased nd fueled our rig. Left site at 5:00PM. |                                     |                                           |                           |

Eric V Steen 1/15/14  
CLIENT REPRESENTATIVE DATE  
Ernest A. Todd CBA  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/15/2014  
DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 16, 2014

Start Time 6:00AM End Time 4:30PM Total Hrs. 10.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     | Owned Equipment                           |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28802</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28840</u> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                           | Total Miles <u>38</u>     |
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5085</u>    |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5096</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                           | Total Hrs. <u>11</u>      |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2100</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2100</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2285</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2292</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                           | Total Hrs. <u>7</u>       |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Rental Equipment                          |                           |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | VF                                  | Rental Company <u>CAT</u>                 |                           |
| EW-332                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 57'                                 | Location <u>OHIO CAT</u>                  | Start Hrs. <u>220</u>     |
| EW-333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 67'                                 | Equipment Type <u>316E</u>                | Ending Hrs. <u>230</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Unit # <u>CAT0316EEDZW01016</u>           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Unit #                                    | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     | Unit #                                    | Total Hrs. <u>0</u>       |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                                           |                           |
| <p>We arrived on site at 6:00AM. We started our iron. Had a safety meeting. Then began drilling on EW-332 at 6:30AM. Finished drilling at 9:05AM. I then set up on EW-333. Started drilling at 9:40AM while Gregg and Kaleb completed EW-332. I finished drilling on EW-333 at 1:15PM. We loaded all trash out and hauled fill for two benches. I completed EW-333 while fill was hauled. I built my benches for tomorrow. Set up on EW-330. Greased and fueled the rig. Left site at 4:30PM.</p> |                                     |                                           |                           |

CLIENT REPRESENTATIVE 1/16/14 DATE

Eric V Steen  
AEGL SITE SUPERVISOR

1/16/2014  
DATE

NAME & TITLE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 18, 2014

Start Time 7:00AM End Time 2:00PM Total Hrs. 7.0

| DRILLING                                                                                                                                                                                                                                                                                                                                                   |                                     | Owned Equipment                           |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 0                                                                                                                                                                                                                                                                                                                                                          | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28864</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                          | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28892</u> |
| 0                                                                                                                                                                                                                                                                                                                                                          | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>28</u>     |
| 4                                                                                                                                                                                                                                                                                                                                                          | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5096</u>    |
| 0                                                                                                                                                                                                                                                                                                                                                          | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5105</u>   |
|                                                                                                                                                                                                                                                                                                                                                            |                                     |                                           | Total Hrs. <u>9</u>       |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                 |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2100</u>    |
| WELL #                                                                                                                                                                                                                                                                                                                                                     | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2100</u>   |
|                                                                                                                                                                                                                                                                                                                                                            |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2292</u>    |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2302</u>   |
|                                                                                                                                                                                                                                                                                                                                                            |                                     |                                           | Total Hrs. <u>10</u>      |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                   |                                     | Rental Equipment                          |                           |
| We arrived on site at 7:00AM. Started our equipment. Had a safety meeting. We hauled fill for benches while CAT serviced the drill rig. We broke a hydraulic line on the 718 truck. Pipeline then hauled fill for us in order to finish two more benches on the north slope. We built four benches and roads for access to the wells. Left site at 2:00PM. |                                     | Rental Company <u>CAT</u>                 |                           |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Location <u>OHIO CAT</u>                  | Start Hrs. <u>279</u>     |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Equipment Type <u>316E</u>                | Ending Hrs. <u>290</u>    |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Unit # <u>CAT0316EEDZW01016</u>           | Total Hrs. <u>11</u>      |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Unit #                                    | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                            |                                     | Location                                  | Start Hrs.                |
| Equipment Type                                                                                                                                                                                                                                                                                                                                             | Ending Hrs.                         |                                           |                           |
| Unit #                                                                                                                                                                                                                                                                                                                                                     | Total Hrs. <u>0</u>                 |                                           |                           |

James A. Tadi 1/18/14  
CLIENT REPRESENTATIVE DATE  
James A Tadi CSA  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/18/2014  
DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 17, 2014

Start Time 6:00AM End Time 5:00PM Total Hrs. 11.0

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     | Owned Equipment                           |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 122'                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28840</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28864</u> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Miles <u>24</u>     |
| 122'                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LINEAR FEET OF WELL COMPLETION      | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5096</u>    |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                    | How many benches built              | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5105</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>9</u>       |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                    | # Of Safety Grates Installed        | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2100</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2100</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2292</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2302</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>10</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Rental Equipment                          |                           |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                                                                               | VF                                  | Rental Company                            |                           |
| EW-330                                                                                                                                                                                                                                                                                                                                                                                                                                               | 49'                                 | Location                                  | OHIO CAT                  |
| EW-331                                                                                                                                                                                                                                                                                                                                                                                                                                               | 73'                                 | Equipment Type                            | 316E                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Unit #                                    | CAT0316EEDZW01016         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Start Hrs. <u>279</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Ending Hrs. <u>290</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>11</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Location                                  |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment Type                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Start Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Ending Hrs. <u>0</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Location                                  |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment Type                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Start Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Ending Hrs. <u>0</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                           | Total Hrs. <u>0</u>       |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     |                                           |                           |
| <p>We arrived on site at 6:00AM. Started our equipment. Had a safety meeting then began drilling on EW-330 at 6:40AM. Finished drilling EW-330 to depth at 8:30AM. We set the well casing. I then moved the rig to EW-331 and began drilling while Gregg and Kaeleb loaded trash out. They completed as well. I finished drilling EW-331 at 1:20PM. I moved the drill off of the slope. We set the casing and completed. We left site at 5:00PM.</p> |                                     |                                           |                           |

CLIENT REPRESENTATIVE 1/17/14 DATE

Eric V Steen  
AEGL SITE SUPERVISOR

1/17/2014  
DATE

NAME & TITLE





American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 20, 2014

Start Time 6:00AM End Time 5:00PM Total Hrs. 11.0

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Owned Equipment                           |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28954</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>28983</u> |
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>31</u>     |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5106</u>    |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5117</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           | Total Hrs. <u>11</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2132</u>    |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2142</u>   |
| EW-50R3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 71'                                 |                                           | Total Hrs. <u>10</u>      |
| EW-334                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 53'                                 | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2300</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2310</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |                                           |                           |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 6:00AM. Started all iron. Had our safety meeting. Began drilling on EW-50R3 at 6:35AM. Drilled to 65' encountering sludge. Drilled to a 71' bore depth when EW-50R3 was called due to heavy sludge. I then moved the rig to EW-334 and started drilling at 10:35AM. Gregg and Kaeleb set the 8" well casing and completed. I finished drilling at 12:30PM. We set the well casing and completed EW-334. We loaded all trash out and dressed up around EW-334. We built our last two benches as well. Topped off equipment with fuel. Shoveled out tracks then left site at 5:00PM.</p> |                                     | Rental Company <u>CAT</u>                 |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Location <u>OHIO CAT</u>                  | Start Hrs. <u>275</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Equipment Type <u>316E</u>                | Ending Hrs. <u>285</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Unit # <u>CAT0316EEDZW01016</u>           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Unit #                                    | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     | Location                                  | Start Hrs.                |
| Equipment Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Ending Hrs.                         |                                           |                           |
| Unit #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Total Hrs. <u>0</u>                 |                                           |                           |

Eric V Steen 1/20/14  
CLIENT REPRESENTATIVE DATE  
Eric V Steen  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/20/2014  
DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 21, 2014

Start Time 5:30am End Time 5:00PM Total Hrs. 11.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Owned Equipment                           |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 126'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>28983</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>29038</u> |
| 126'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>55</u>     |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5117</u>    |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5129</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                           | Total Hrs. <u>12</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2142</u>    |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2152</u>   |
| EW-173                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 72'                                 |                                           | Total Hrs. <u>10</u>      |
| EW-172                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 54'                                 | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2310</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2320</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                           | Total Hrs. <u>10</u>      |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 5:30AM. Started our iron. Had a safety meeting. Started drilling on EW-327 at 6:30AM. Drilled through pipelines 6" lateral. Dug back on the line to stop the vacuum leak. Moved the rig to EW-173 and began drilling at 7:00AM. Finished drilling at 10:15AM. I then moved the rig to EW-172. Started drilling on EW-172 at 12:35AM while well casing and completion took place. I finished drilling EW-172 at 2:00PM. We set the well and completed. loaded all trash out. Fixed the bench for EW-327. Fueled and greased drill. Set rig up on EW-327 for tomorrow. Left site at 5:00PM.</p> |                                     | Rental Company <u>CAT</u>                 | Start Hrs. <u>285</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>295</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     | Unit #                                    |                           |

Eric V Steen 1/21/14  
CLIENT REPRESENTATIVE DATE  
James X Tadi CQA  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/21/2014  
DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

**SUPERVISOR:** Eric V Steen  
**PROJECT NAME:** Lorain Co.  
**PROJECT #:** 10-113-130

**DATE:** January 22, 2014

**Start Time** 5:30am **End Time** 6:00PM **Total Hrs.** 12.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     | Owned Equipment                           |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>29038</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>29068</u> |
| 124'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>30</u>     |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5129</u>    |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5140</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                                           | Total Hrs. <u>11</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2152</u>    |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2164</u>   |
| EW-327                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 24'                                 |                                           | Total Hrs. <u>12</u>      |
| EW-151R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100'                                | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2323</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2332</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                                           | Total Hrs. <u>9</u>       |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 5:30AM. Started all equipment. Had a safety meeting. Began drilling on EW-327 at 6:30AM. Finished drilling at 8:30AM. We set the casing and completed. EW-327 was called at 24' due to sludge and water. I then started drilling EW-151R at 9:35AM. Drilled to 100'. Hit a obstruction not being able to drill through. I finished drilling at 2:10PM. EW-151R was called at 100' due to a obstruction. We set the well casing. Loaded all trash out to active working phase and completed. We fueled and greased drill rig. Left site at 6:00PM.</p> |                                     | Rental Company <u>CAT</u>                 | Start Hrs. <u>271</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>282</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>11</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     | Unit #                                    |                           |

Eric V Steen 1/22/14  
CLIENT REPRESENTATIVE DATE  
James A Toldo CCR  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/22/2014  
DATE





American  
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Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 23, 2014

Start Time 5:30AM End Time 4:00PM Total Hrs. 10.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Owned Equipment                           |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 96'                                                                                                                                                                                                                                                                                                                                                                                           | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>29068</u>  |
| 0                                                                                                                                                                                                                                                                                                                                                                                             | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>29119</u> |
| 96'                                                                                                                                                                                                                                                                                                                                                                                           | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>51</u>     |
| 1                                                                                                                                                                                                                                                                                                                                                                                             | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5140</u>    |
| 0                                                                                                                                                                                                                                                                                                                                                                                             | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5150</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                    |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2164</u>    |
| WELL #                                                                                                                                                                                                                                                                                                                                                                                        | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2174</u>   |
| <u>EW-51R3</u>                                                                                                                                                                                                                                                                                                                                                                                | <u>96'</u>                          |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2332</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2342</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     |                                           | Total Hrs. <u>10</u>      |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                      |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 5:30AM. Started equipment. Had a safety meeting. Started drilling EW-51R3 at 6:40AM. EW-51R3 is a 8" well. Finished drilling EW-51R3 at 1:05PM. EW-51R3 was called at a 96' bore depth due to sludge. We set the 8" well casing and completed. We loaded all trash out. Moved the rig to our final well location. Fueled and greased drill. Left site at 4:00PM.</p> |                                     | Rental Company <u>CAT</u>                 |                           |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Location <u>OHIO CAT</u>                  | Start Hrs. <u>282</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type <u>316E</u>                | Ending Hrs. <u>292</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Unit # <u>CAT0316EEDZW01016</u>           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Unit #                                    | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                               |                                     | Location                                  | Start Hrs.                |
| Equipment Type                                                                                                                                                                                                                                                                                                                                                                                | Ending Hrs.                         |                                           |                           |
| Unit #                                                                                                                                                                                                                                                                                                                                                                                        | Total Hrs. <u>0</u>                 |                                           |                           |

Eric V Steen 1/23/14  
CLIENT REPRESENTATIVE DATE  
Eric V Steen CAE  
NAME & TITLE

Eric V Steen  
AEGL SITE SUPERVISOR

1/23/2014  
DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 24, 2014

Start Time 5:30AM End Time 7:30AM Total Hrs. 2.0

| DRILLING                                                                                                                                                                                                                                                                                         |                                     | Owned Equipment                           |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------|---------------------------|
| 0                                                                                                                                                                                                                                                                                                | LINEAR FEET OF DRILLING             | Equipment # <u>7281 / 7235</u>            | Start Miles <u>29068</u>  |
| 0                                                                                                                                                                                                                                                                                                | LINEAR FEET OF DRILLING-ABANDONMENT | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>29119</u> |
| 0                                                                                                                                                                                                                                                                                                | LINEAR FEET OF WELL COMPLETION      |                                           | Total Miles <u>51</u>     |
| 1                                                                                                                                                                                                                                                                                                | How many benches built              | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5140</u>    |
| 0                                                                                                                                                                                                                                                                                                | # Of Safety Grates Installed        | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5150</u>   |
|                                                                                                                                                                                                                                                                                                  |                                     |                                           | Total Hrs. <u>10</u>      |
| COMPLETION                                                                                                                                                                                                                                                                                       |                                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2164</u>    |
| WELL #                                                                                                                                                                                                                                                                                           | VF                                  | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2174</u>   |
|                                                                                                                                                                                                                                                                                                  |                                     |                                           | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                  |                                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2332</u>    |
|                                                                                                                                                                                                                                                                                                  |                                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2342</u>   |
|                                                                                                                                                                                                                                                                                                  |                                     |                                           | Total Hrs. <u>10</u>      |
| COMMENTS                                                                                                                                                                                                                                                                                         |                                     | Rental Equipment                          |                           |
| <p>We arrived on site at 5:30AM. Had our safety meeting. Started all equipment but our 718 hual truck. It appears our haul truck has frozen fuel lines. Built our final bench. Moved the rig onto the bench for Saturday drilling. We left site at 7:30AM due to extreme weather conditions.</p> |                                     | Rental Company <u>CAT</u>                 | Start Hrs. <u>282</u>     |
|                                                                                                                                                                                                                                                                                                  |                                     | Location <u>OHIO CAT</u>                  | Ending Hrs. <u>292</u>    |
|                                                                                                                                                                                                                                                                                                  |                                     | Equipment Type <u>316E</u>                | Total Hrs. <u>10</u>      |
|                                                                                                                                                                                                                                                                                                  |                                     | Unit # <u>CAT0316EEDZW01016</u>           |                           |
|                                                                                                                                                                                                                                                                                                  |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                  |                                     | Location                                  | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                  |                                     | Equipment Type                            | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                  |                                     | Unit #                                    |                           |
|                                                                                                                                                                                                                                                                                                  |                                     | Rental Company                            | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                  |                                     | Location                                  | Ending Hrs.               |
| Equipment Type                                                                                                                                                                                                                                                                                   | Total Hrs. <u>0</u>                 |                                           |                           |
| Unit #                                                                                                                                                                                                                                                                                           |                                     |                                           |                           |

Eric V Steen 1/24/14  
CLIENT REPRESENTATIVE DATE  
James A. Todia CQA  
NAME & TITLE

Eric V Steen 1/24/2014  
AEGL SITE SUPERVISOR DATE



American  
Environmental  
Group Ltd.

## Drill Crew Daily Report

SUPERVISOR: Eric V Steen  
PROJECT NAME: Lorain Co.  
PROJECT #: 10-113-130

DATE: January 27, 2014

Start Time 5:30AM End Time 3:00PM Total Hrs. 9.5

| DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     | Owned Equipment                           |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------|---------------------------|
| 25' LINEAR FEET OF DRILLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     | Equipment # <u>7281 / 7235</u>            | Start Miles <u>29119</u>  |
| 0 LINEAR FEET OF DRILLING-ABANDONMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     | Equipment Type / <u>Pick Up / Trailer</u> | Ending Miles <u>29245</u> |
| 25' LINEAR FEET OF WELL COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                                           | Total Miles <u>126</u>    |
| 0 How many benches built                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     | Equipment # <u>130DNXQ1445</u>            | Start Hrs. <u>5150</u>    |
| 0 # Of Safety Grates Installed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     | Equipment Type <u>Drill Rig</u>           | Ending Hrs. <u>5158</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                           | Total Hrs. <u>8</u>       |
| COMPLETION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     | Equipment # <u>CAT0953DPLBP01212</u>      | Start Hrs. <u>2174</u>    |
| WELL # <u>6" ROCK SUMP</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | VF <u>25'</u>       | Equipment Type <u>Track Loader</u>        | Ending Hrs. <u>2180</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                           | Total Hrs. <u>6</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Equipment # <u>JCB718ATC70832203</u>      | Start Hrs. <u>2342</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Equipment Type <u>Hual Truck</u>          | Ending Hrs. <u>2342</u>   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                           | Total Hrs. <u>0</u>       |
| COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     | Rental Equipment                          |                           |
| <p>We arrived on site at 5:30AM. We had a safety meeting. Started drilling on the rock sump at 7:20AM Finished drilling at 8:00AM. Rock sump was called at 25' due to sludge and water. We set the 6" well casing and completed. I took the rig to the bottom of hill. Pulled the kellys off of rig. Cleaned up all pipe to the bone yard. Packed up our job trailer. Loaded bucket and hole covers onto #7281. We then off loaded our 150' kellys and re loaded 120' kellys. Hooked up to our trailer. Left site at 3:00PM.</p> |                     | Rental Company <u>CAT</u>                 |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Location <u>OHIO CAT</u>                  | Start Hrs. <u>292</u>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Equipment Type <u>316E</u>                | Ending Hrs. <u>300</u>    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Unit # <u>CAT0316EEDZW01016</u>           | Total Hrs. <u>8</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Location                                  | Start Hrs.                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Equipment Type                            | Ending Hrs.               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Unit #                                    | Total Hrs. <u>0</u>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Rental Company                            |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | Location                                  | Start Hrs.                |
| Equipment Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Ending Hrs.         |                                           |                           |
| Unit #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total Hrs. <u>0</u> |                                           |                           |

Eric V Steen  
AEGL SITE SUPERVISOR

1/27/2014  
DATE

CLIENT REPRESENTATIVE

DATE

NAME & TITLE







**Daily Field Report**

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Obelin, OH  
CQA Monitor: Janet Todia  
Weather: overcast, fair, 38°F

Project No: 150.0001  
Date: 12/5/13  
Time Onsite: 1300  
Time Offsite: 1530

**Items Worked On:**

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

Contractor(s): PRE CON MEETING  
ABG Drilling; ABG Construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: pipes & equipment

**Summary of Work:**

pre con meeting w/ ABG Drilling &  
ABG construction

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/5/13  
Signature of CQA Monitor Date



**Daily Field Report**Name of Project/Site: LODGE TE Phase 4Project No: 150.0001Project/Site Location: Obelisk, 04Date: 12/9/13CQA Monitor: Janet TodiaTime Onsite: 0700Weather: overcast + 20°F

Time Offsite: \_\_\_\_\_

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☐ Waste Excavation/Relocation  
☒ GCCS Piping

- ☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARCO constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): Minor requested survey, called internetAlteration(s): N/ADeliveries: Pipe

## Summary of Work:

- at 0700 arrived on site for safety meeting  
- minor stated no excavation today; will  
dig pipe, pour pipe or build trench for  
haul road to 12" header isolation  
valve + T area for Tuesday

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/9/13

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Chester, OH  
CQA Monitor: Jane Todia  
Weather: cold, clear, 19°F

Project No: 158.0001  
Date: 12/10/13  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): ARG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): Jaguet Brotherton, BEL Willett (schedule survey)  
Alteration(s): add 2" air 50R3 to 51R2; redrills added BW151R + BW51R3;  
Deliveries: 2 road kings added BW330 to 12" header + BW332 to BW301

## Summary of Work:

- separate 12" header from original location in north line to tie in T & isolation valve (all 12")
- trench BW50R3 to 12" tie in point for installation of 6" lateral + 2" air line
- called SC's plant to isolate 12" @ 1000; kept slight pull on 6" loop lateral to control flows
- BW151 + BW51R2 will be added to redrills due to 21' pinch BW151 + 25' pinch BW51R2
- cancel air line from 50R3 to 51R2
- 2 additional road kings needed BW330 to 12" header + BW332 to BW301; body brick + CMP

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Jane Todia 12/10/13  
Signature of CQA Monitor Date



# Daily Field Report

Name of Project/Site: Lorain II Phase 4

Project No: 150.0001

Project/Site Location: Oberlin, OH

Date: 12/11/13

CQA Monitor: Janet Todia

Time Onsite: 0700

Weather: extreme cold; -2°F wind chill  
clear

Time Offsite: 1800

## Items Worked On:

- ☐ Gas Extraction Wells
- ☐ Gas Extraction Well Abandonment
- ☐ Waste Excavation/Relocation
- ☒ GCCS Piping

- ☐ Pressure Testing
- ☐ Temporary FML Installation/Repair
- ☐ Stormwater Channels/Structures
- ☐ Other -

fuse pipe - no installation or trenching

Contractor(s): AKO construction

Subcontractor(s):

Visitor(s): N/A

Phone Call(s):

Alteration(s):

Deliveries:

## Summary of Work:

- stage & fuse pipe  
- no installation or pressure tests

## Attachments:

- ☐ Contractor Report
- ☐ Field Notes
- ☐ Other:

Janet Todia 12/11/13

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Kolair II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: severe cold & clear 30°F & windy

Project No: 150.0001  
Date: 12/12/13  
Time Onsite: 0700  
Time Offsite: 1830

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): ARG construction; Weller Engineering (survey)  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): Butchko (hit/uncovered conduit)  
Alteration(s): relocate BW5DR3 & locate redills 151R & 51R3  
Deliveries: brick & CMP; used 12 bags bentonite from drilling

Summary of Work:   
- continue 12" from 6", 2" & 4" lateral trench (to BW5DR3)  
- continue 12" from isolation valve through road crossing; ran across 480V & called Butchko so no risk of actually hitting 480V  
- T'd in 4" 2" & 6" x 12"  
- placed 2 rock sumps for leachate collection to drain to trash  
- Weller on site to survey  
- will continue 12" tomorrow

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/12/13  
Signature of CQA Monitor Date





# Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Cherlin, OH  
CQA Monitor: Janet Todia  
Weather: cold & clear 23°F

Project No: 150.0001  
Date: 12/13/13  
Time Onsite: 0700  
Time Offsite: 1800

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): ARE construction  
Subcontractor(s): Welfert Engineering (survey)  
Visitor(s): NIA  
Phone Call(s): NIA  
Alteration(s): 50R3, 57R3, 157R relocated  
Deliveries: pipe & materials for drilling crew

## Summary of Work:

0700 arrive on site; safety meeting  
0800 continue w/ 12" header, 2' air + 4" force  
main to the north  
- tie in 6" 4" + 2" paps off of 12" for well  
BW328  
- survey new well locations w/ Welfert;  
bet. wants construction to avoid  
existing header  
- litter by road due to waste removal  
- 1800 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/13/13

Signature of CQA Monitor

Date



# Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Tamara Todia  
Weather: snow, slippery slopes, 31°F

Project No: 150.0001  
Date: 12/14/13  
Time Onsite: 0700  
Time Offsite: 1000

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

*NO WORK TODAY*

Contractor(s): AEG Drilling, AEG Construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

*0700 arrive on site safety meeting;  
drillers are here  
0815 decide no work today due to  
slippery slopes  
- help set up drilling staging area  
hand out prints to drilling  
1000 leave site*

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Tamara Todia 12/14/13*  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lebanon II Phase 4Project No: 150.0001Project/Site Location: Ogden, OHDate: 12/16/13CQA Monitor: Tom TodiaTime Onsite: 0700Weather: cold, clear, 30°FTime Offsite: 1730

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

- ☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ABG Construction, ABG DrillingSubcontractor(s): N/AVisitor(s): (N/A) safety guy from ABGPhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 SwitchKO will mark 480V across  
LK3 to LK4 (BW333)  
-working on 12" leader from pups for  
KW328 to the northwest corner  
-complete pups for BW329 & have stubs  
for corner to continue to tie in  
point tomorrow  
hauling slow due to slippery slopes &  
roads  
-another drilling 900ft - will broadcast  
order of well installation

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Tom Todia 12/16/13  
Signature of CQA Monitor Date





## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Obelia, OH  
CQA Monitor: Tenet Todia  
Weather: cold 19°F + clear; snowy

Project No: 150.0001  
Date: 12/17/13  
Time Onsite: 0700  
Time Offsite: 1800

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

- ☒ Pressure Testing *moved to tomorrow*  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARB construction, ARB drilling  
Subcontractor(s): N/A  
Visitor(s): ARB safety guy  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 continue 12" header from northwest  
coming to tie in point; anticipated  
will pressure test today  
continue working on 12" 11" x 2" to the  
pouch tie in point  
drilling is hauling dirt & set up on  
RW42R2 for tomorrow  
1700 complete the 12" run & have small  
tie in area open for tomorrow; backfill  
1800 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Tenet Todia* 12/17/13  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lo/2in II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: cold & clear 20°F

Project No: 150.0001  
Date: 12/18/13  
Time Onsite: 0700  
Time Offsite: 1800

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

START DRILLING

Contractor(s): ARG construction, ARG drilling  
Subcontractor(s): N/A  
Visitor(s): Jeff Dalest Consulting Engineer T.M  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

- 0700 arrive on site; safety meeting  
- drilling BW4282  
- continue working on 6" laterals & 2" air  
line & 4" force main for BW328 & BW329  
- drill BW329  
- complete lateral trenches for BW328 &  
BW329  
- schedule wellcut to come out Thurs  
- install haul road for new laterals  
- begin PRESSURE TEST on 12" & 6" laterals  
@ 1700; will test overnight

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/18/13  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Loisam II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: warmer / 32°F; anticipate melt

Project No: 150.0001  
Date: 12/19/13  
Time Onsite: 0700  
Time Offsite: 1900

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input checked="" type="checkbox"/> Gas Extraction Wells        | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): AEG construction, AEG drilling  
Subcontractor(s): N/A  
Visitor(s): thoaks from drilling  
Phone Call(s): N/A  
Alteration(s): isolation valves set perpendicular to each other  
Deliveries: ISO fittings (BW45R3 to 89')

## Summary of Work:

0700 arrive on site; safety meeting  
- tie in 12" to complete loop; plant  
disposed from 0900 to 1600; no shut  
downs  
- repair 6" that was impacted prior  
- set up isolation risers for 4" force main +  
2" air  
- AER test passed from 1700 the previous  
night for 6" laterals & 12" header  
- got permission to stay past 6pm; out of  
the gate @ 1900 - called Fosterick  
- drilled BW45R3 to 89' on a 110' bore OK'd  
by Jaguet

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/19/13  
Signature of CQA Monitor Date





# Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: James Todia  
Weather: 30°F + mud + water runoff  
thaw + sloppy

Project No: 150.0001  
Date: 12/20/13  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

NO EXCAVATION; NO DRILLING TODAY

Contractor(s): ABG Construction, ABG Drilling, Willett Engineering  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

Willett on site @ 0800 for as built's +  
well relocation: BW50R3 + BW51R3 + BW51R +  
BW327  
won't be able to excavate or work today  
due to water  
will establish berm for drainage +  
make sure survey points are capped prior  
to 2 week dormer for holiday  
spot w/ protection prior to leaving  
site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

James Todia 12/20/13  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lolain II Phase 4Project No: 158.0001Project/Site Location: Oberlin, OHDate: 12/31/13CQA Monitor: Janet TodiaTime Onsite: 0700Weather: 11°F w/ wind chill; extremelyTime Offsite: 1300

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☐ Waste Excavation/Relocation  
☒ GCCS Piping

- ☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s):

Emergency air line repair  
AREC construction, Willett Engineering

Subcontractor(s):

N/A

Visitor(s):

N/A

Phone Call(s):

N/A

Alteration(s):

final relocation of RW50R3 & RW51R3 by Willett

Deliveries:

N/A

## Summary of Work:

rec'd call from SDS yesterday that lost  
50 lbs air pressure; called AREC to make  
today to make 2" air line repair  
found air leak was fused repair (accidental  
snag) of 2" & 12" with slope fix in  
Willett on site to relocate wells RW50R3 &  
RW51R3 only  
made 2" repair; no trash excavated or  
hauled; called SDS & compressor is back  
to 100 lbs outlet pressure; repair  
successful

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 12/31/13

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lolain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: extremely wet; melted 39°F

Project No: 158.0001  
Date: 1/13/14  
Time Onsite: 0700  
Time Offsite: 1400

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping          | <input type="checkbox"/> Other -                           |

NO DRILLING OR CONSTRUCTION TODAY

Contractor(s): ARG drilling, ARG construction, Wellnet (wunny)  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

arrive on site; extremely wet; minor will  
doze road to clear mud; very slippery  
0915 Wellnet on site to instake wells  
due to frost heave  
1200 PRESSURE TEST all three 6" laterals  
@ 25 psi for remote runs; will  
test overnight  
called Janet to discuss weather; too  
wet to haul  
1400 left early due to haul road  
conditions

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 1/13/14  
Signature of CQA Monitor

Date



**Daily Field Report**

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: extremely wet; rain 42°F

Project No: 158,0001  
Date: 11/14/14  
Time Onsite: 0700  
Time Offsite: 1700

**Items Worked On:**

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input checked="" type="checkbox"/> Gas Extraction Wells        | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                            | <input type="checkbox"/> Other -                           |

Contractor(s): ARO Construction, ABO Drilling, Wellcut  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

arrive on site; extremely muddy, to haul  
0800 meeting w/ JAG on site  
0830 air pressure test PASS on (3) 6"  
remote laterals @ 25 psi  
drill  
- drill Lw 46R2 to depth of 115'  
- wellcut on site to take out 480V  
from KR3 to LR4

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 11/14/14  
Signature of CQA Monitor Date

**Daily Field Report**

Name of Project/Site: LO/212 IE Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Jamie Todia  
Weather: windy + cold 19°F

Project No: 150.0001  
Date: 1/15/14  
Time Onsite: 0700  
Time Offsite: 1730

**Items Worked On:**

☒ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ALB Drilling, ALB construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site safety meeting  
0730 drilling BW303R  
- prepare remote lateral connection &  
road crossing for BW44R2  
- prepare remote lateral connection &  
road crossing BW45R3  
- prepare benches for BW332 & BW327 to  
be drilled tomorrow

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Jamie Todia 1/15/14  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4Project No: 158.0001Project/Site Location: Oberlin, OHDate: 1/16/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: windy, cold, snow 19°FTime Offsite: 1730

## Items Worked On:



Gas Extraction Wells



Gas Extraction Well Abandonment



Waste Excavation/Relocation



GCCS Piping



Pressure Testing



Temporary FML Installation/Repair



Stormwater Channels/Structures



Other -

Contractor(s): AKG construction, AEG drillingSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

- 0700 arrive on site; safety meeting
- drilled RW332
  - completed remote lateral RW42R2
  - completed lateral RW303R to RW307R
  - drilled RW333
  - used 12" CMP for RW42R2
  - used 18" CMP for RW45R3
  - used 18" CMP for RW46R2
  - used 12" CMP for RW303R to RW307R
  - hauling extremely slow due to ice/dust

## Attachments:



Contractor Report



Field Notes



Other:

Janet Todia 1/16/14

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: cold + clear 23°F

Project No: 150.0001  
Date: 11/17/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:



☒ Gas Extraction Wells  
☒ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARG construction, ARG drilling, Wellnet  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 drill RW330  
0812 separate RW301 to RW332 by lateral  
tie in; called SCG for scheduled shut down  
of rock corner/isolation  
1100 tie in RW303R to RW307R after isolation  
Wellnet on site to survey as built & location for  
additional rock sums; abandon RW303  
tie in all remote laterals RW42R2, RW45R3, &  
RW46R2; drill RW331  
1600 brought plant back up to full load  
1700 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 11/17/14  
Signature of CQA Monitor Date





# Daily Field Report

Name of Project/Site: Lolain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Tony Todia  
Weather: cold & clear 30°F

Project No: 150.0001  
Date: 11/18/14  
Time Onsite: 0700  
Time Offsite: 1200

## Items Worked On:



☒ Gas Extraction Wells  
☒ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

*Drilling on mainline (Sunday)*

Contractor(s): ARCO drilling, ARCO construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

*safety meeting  
w/land, air & force main BW42R2  
exting air & force main BW45R2  
haul dirt & create haul road for Monday  
to run lateral BW330 to BW333 to BW331  
active phase closed @ 1100; will complete  
BW46R2 air & force main connection  
later  
abandon BW42R  
abandon BW45R2*

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Tony Todia 11/18/14*  
Signature of CQA Monitor Date

**Daily Field Report**

Name of Project/Site: Wesley II Phase 4  
Project/Site Location: Obertown, OH  
CQA Monitor: Terat A Todio  
Weather: 30°F + overcast

Project No: 150.0001  
Date: 11/20/14  
Time Onsite: 0700  
Time Offsite: 1800

**Items Worked On:**

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input checked="" type="checkbox"/> Gas Extraction Wells        | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): AREG construction, AREG drilling  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site  
drill GW50R3  
install 6", 2" & 4" lateral RW333, to RW331, to  
RW330  
drill RW334  
operate tie ins of air, force main & 4"  
lateral for RW50R3  
PRESSURE TEST 6" lateral RW328 & all of 2" air &  
4" force main up to isolation valve on  
north slope (will run overnight)  
notify SDS tomorrow, we will have  
isolation for 2 lateral tie ins RW50R3

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Signature of CQA Monitor

Date

Terat A Todio 11/20/14





## Daily Field Report

Name of Project/Site: Lorain II Phase 4Project No: 157.0001Project/Site Location: Obelia, OHDate: 1/21/14CQA Monitor: Tony TodiaTime Onsite: 0700Weather: cold & windy 14°FTime Offsite: 1800

## Items Worked On:

- ☒ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

- ☒ Pressure Testing (passed) + 1 initiated  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARG construction, ARG drillingSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

safety meeting  
drill BWS 173  
expose lateral for BWS 334  
PRESSURE TEST pass, 2" air, 4" force main up  
to 12" isolation valve (entire run) & 4"  
lateral to BWS 328  
drill BWS 334 BWS 172  
with header isolation to tie in lateral  
runs BWS 334 AND BWS 330, BWS 331, BWS 333 AND  
BWS 333  
did not tie in BWS 334; just ran lateral &  
air force main put on air test

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Tony Todia 1/21/14  
Signature of CQA Monitor

Date

**Daily Field Report**

|                                                |                             |
|------------------------------------------------|-----------------------------|
| Name of Project/Site: <u>Lorain II Phase 4</u> | Project No: <u>150.0001</u> |
| Project/Site Location: <u>Oberlin, OH</u>      | Date: <u>1/22/14</u>        |
| CQA Monitor: <u>Jaquet Todia</u>               | Time Onsite: <u>0700</u>    |
| Weather: <u>cold + clear 14°F</u>              | Time Offsite: <u>1700</u>   |

**Items Worked On:**

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

Contractor(s): AEO drilling, AEO construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site; go to BW327; Steve called & hit 12" x 2" line; called SCS - dead lines so continued drilling BW327  
excavate lateral BW334 for tie in today  
Jaquet gave permission to set BW327 @ 24'  
how deep to liquids; also use 10' solid BGL  
will make rock sump dual extraction  
drill BW151R  
drill BW327

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Signature of CQA Monitor

Date

Jaquet Todia 1/22/14



## Daily Field Report

Name of Project/Site: Lublin II Phase 4Project No: 157.0001Project/Site Location: Oberlin, OHDate: 1/23/14CQA Monitor: Jonat TodiaTime Onsite: 0700Weather: cold & clear 9°FTime Offsite: 1800

## Items Worked On:



Gas Extraction Wells



Pressure Testing



Gas Extraction Well Abandonment



Temporary FML Installation/Repair



Waste Excavation/Relocation



Stormwater Channels/Structures



GCCS Piping



Other -

Contractor(s): NEG construction, NEW drilling

Subcontractor(s):

Visitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 safety meetingDrill RW51R3excavate for tie in RW173 12"x6" tee no air  
\* force mainexcavate for tie in RW172 12x6" tee no air  
\* force mainPRESSURE TEST passed 6" lateral RW173 to  
12" header

## Attachments:



Contractor Report



Field Notes



Other:

Jonat Todia 1/23/14

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Tamir Todia  
Weather: Extremely cold + clear 6°F

Project No: 158.0001  
Date: 1/27/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other                             |

Contractor(s): Drilling demobed  
AEG drilling, AEG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

Summary of Work: 0700 arrive on site safety meeting  
- drilling is working on rock sump well (RSW-1)  
- need emergency installation of air free  
main road leachate vault to locate air  
leak  
- had trouble finding 24" header but eventually  
found it  
- completed rock sump + isolation valves  
- drilling demobed + got certification to  
leave @ 1540  
Note: 1/25/14 + 1/26/14 did not work due to  
temps of -28°F

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Signature of CQA Monitor

Date

Tamir Todia 1/27/14



**Daily Field Report**Name of Project/Site: W/211 II Phase 4Project No: 150.0001Project/Site Location: Obelvia, OHDate: 1/30/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: cold & clear 19°FTime Offsite: 1700**Items Worked On:**

Gas Extraction Wells



Gas Extraction Well Abandonment



Waste Excavation/Relocation



GCCS Piping



Pressure Testing



Temporary FML Installation/Repair



Stormwater Channels/Structures



Other -

Contractor(s): ABG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A**Summary of Work:**

0700 safety meeting  
0730 install shut off isolation valve (air only)  
in the 24" pipe trench near the hatchate  
isolation vault  
1350 install air and force main shut off  
valve on the road slope  
1400 fabricate pump set ups for RWISLR,  
RSW-1, & 1275327  
install well heads

**Attachments:**

Contractor Report



Field Notes



Other:

Janet Todia 1/30/14

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Korwin II Phase 4  
Project/Site Location: Berlin, OH  
CQA Monitor: Tanet Todio  
Weather: 27°F + overcast

Project No: 157.0001  
Date: 11/31/14  
Time Onsite: 0700  
Time Offsite: 1840

## Items Worked On:



☒ Gas Extraction Wells  
☒ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ABC construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
- tie in BW157R w/ air + force main + pump  
- tie in BW51R3 lateral  
- tie in rock camp well RSW-1 to BW55R +  
tie in air + force main from 12" isolation  
valve shut ups  
- abandon BW157 + BW51R2  
- a lot of dig work + haul dirt to  
put berms back in place  
- looking for air line pressure loss source  
on rock side

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Tanet Todio 11/31/14  
Signature of CQA Monitor Date





## Daily Field Report

Name of Project/Site: Lorain II phase 4Project No: 150.0001Project/Site Location: Barlin, OHDate: 2/1/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: Warm, overcast 30°FTime Offsite: 1400

## Items Worked On:

- ☒ Gas Extraction Wells  
☒ Gas Extraction Well Abandonment  
☐ Waste Excavation/Relocation  
☒ GCCS Piping

- ☒ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): AKB constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

- STD agreed on site; safety meeting  
- abandon H185  
- clean up & organize staging area on top of the hill  
- raise H13 due to settlement & burn filling  
- trouble shoot air leak on north slope per request of SCs

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/1/14

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: 19°F + clear

Project No: 158.0001  
Date: 2/13/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                            | <input type="checkbox"/> Other -                           |

Contractor(s): REG construction, Willett  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 excavate + haul finish clay from  
borrow area  
0900 Willett on site for final survey  
1300 Janet reports one more air  
isolation valve on east slope to  
isolate the "V" connection; now all  
4 air legs can be isolated (do tomorrow)  
PRESSURE TEST PASS 2" air + 4" force  
main from pit up to rock isolation  
valves

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/13/14  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lorian II Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 2/4/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: 10°F & clear; winter storm warning tonightTime Offsite: 1700

## Items Worked On:

☐ Gas Extraction Wells☐ Pressure Testing☐ Gas Extraction Well Abandonment☐ Temporary FML Installation/Repair☒ Waste Excavation/Relocation☐ Stormwater Channels/Structures☒ GCCS Piping☐ Other -Contractor(s): AEG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 separate to locate air line to  
install isolation valve on the "Y"  
therefore, isolation all 4 air legs  
1000 locate & tie in isolation valve  
1103 contact Janet & ask if more  
isolation valves are needed or if  
we should demolish; Janet will contact  
SCS regarding air leaks & we demolish  
final walk through on Monday  
morning 2/10/14

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/14/14  
Signature of CQA Monitor Date





# Daily Field Report

Name of Project/Site: Lorsin II Phase 4  
Project/Site Location: Obellin, OH  
CQA Monitor: Janet Todia  
Weather: cold + windy 19°F

Project No: 150.0001  
Date: 2/17/14  
Time Onsite: 0700  
Time Offsite: 1630

## Items Worked On:

- |                                                                     |                                                                       |
|---------------------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                       | <input type="checkbox"/> Pressure Testing                             |
| <input checked="" type="checkbox"/> Gas Extraction Well Abandonment | <input checked="" type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation                | <input type="checkbox"/> Stormwater Channels/Structures               |
| <input type="checkbox"/> GCCS Piping                                | <input type="checkbox"/> Other -                                      |

*UNCOVER to liner; no repairs today*

Contractor(s): ARB construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

*0700 arrive on site; safety meeting  
0730 begin uncover liner repairs; will  
not repair core seals today; just  
uncover for prep tomorrow + will  
repair tomorrow*

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Janet Todia 2/17/14*  
Signature of CQA Monitor Date



# Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: 34°F; thawing + melting  
very wet

Project No: 150.0001  
Date: 2/19/14  
Time Onsite: 0700  
Time Offsite: 1800

## Items Worked On:

- |                                                                     |                                                                       |
|---------------------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                       | <input type="checkbox"/> Pressure Testing                             |
| <input checked="" type="checkbox"/> Gas Extraction Well Abandonment | <input checked="" type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation                | <input type="checkbox"/> Stormwater Channels/Structures               |
| <input type="checkbox"/> GCCS Piping                                | <input type="checkbox"/> Other -                                      |

Contractor(s): ARG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
perform shear + peel test PASS  
bore seal repair + abandonment RW227  
bore seal repair + abandonment RW101R  
bore seal repair + abandonment RW225  
bore seal repair + abandonment RW226  
bore seal repair + abandonment RW140R  
bore seal repair + abandonment RW228

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/19/14  
Signature of CQA Monitor Date



# Daily Field Report

Name of Project/Site: Lolzin II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: cold + overcast 13°F

Project No: 150.0001  
Date: 2/20/14  
Time Onsite: 0700  
Time Offsite: 1500

## Items Worked On:

- |                                                                     |                                                                       |
|---------------------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                       | <input type="checkbox"/> Pressure Testing                             |
| <input checked="" type="checkbox"/> Gas Extraction Well Abandonment | <input checked="" type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation                | <input type="checkbox"/> Stormwater Channels/Structures               |
| <input type="checkbox"/> GCCS Piping                                | <input type="checkbox"/> Other:                                       |

*no work on 2/21/14 due to thaw*

Contractor(s): AEG construction, Willett Engineering  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0830 after trial well test, bore seal repair  
& deployment BW224  
spend the rest of the day trouble shooting  
20" WC vacuum loss w/ SCS

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/20/14  
Signature of CQA Monitor Date





## Daily Field Report

Name of Project/Site: Lo/air II Phase 4Project No: 157.0001Project/Site Location: Oberlin, OHDate: 2/24/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: cold & clear 20°FTime Offsite: 1800

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

*no work 2/25/14 due to needing supplies*

Contractor(s): REG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arriving on site; safety marking  
pothole areas to trouble shoot 20" WC  
vac loss  
0900 (per) PRE con meeting for Phase 1 2014  
work  
1200 continue to attempt locating vac loss  
or pore seal repair of 20x20 seal due  
to wear/tear / trouble shooting  
SES camera's header @ EW30; nothing  
to note that could cause surge or vac  
loss

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Janet Todia 2/24/14*

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: 8 Berlin, OH  
CQA Monitor: Tanner Todia  
Weather: snow + 9°F

Project No: 158.0001  
Date: 2/26/14  
Time Onsite: 0700  
Time Offsite: 1800

### Items Worked On:

- |                                                          |                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                             |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input checked="" type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures               |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                                      |

Contractor(s): AKG construction, Willett to survey north header  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

### Summary of Work:

0700 arrive on site; safety meeting  
0718 trial weld test; must repair 20x20  
patch from 2/24/14 due to damage  
when it was recovered w/ fill  
Willett survey / mark north header to  
trouble shoot / excavate was 10.5' @  
BW317 to BW348; will regrade header

### Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Tanner Todia 2/26/14  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Loislin II Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 2/28/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: cold & clear 3°F & sunTime Offsite: 1400

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping          | <input type="checkbox"/> Other -                           |

24" materials arrived; just - no excavationContractor(s): ARG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
24" materials & fusion machine arrived  
today w/ 2nd operator  
just pipe (24") only; no excavation  
into waste; just prep for 24"  
header air for main repair

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 2/28/14

Signature of CQA Monitor

Date





## Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet A Todia  
Weather: cold & clear; sunny 3°F

Project No: 150.0001  
Date: 3/3/14  
Time Onsite: 0700  
Time Offsite: 1800

## Items Worked On:

- |                                                          |                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                             |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input checked="" type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures               |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                                      |

Contractor(s): ABC Construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0800 pull & shear test  
0900 repair box seal near BW121R  
" " " " BW87R2  
" " " " BW90R  
" " " " BW94R  
decided to wait on BW121R due to  
liquid/snow melt  
repair box seal near BW79R  
" " " " BW164R

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Signature of CQA Monitor

Date

Janet A Todia 3/3/14



## Daily Field Report

Name of Project/Site: Loisville Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 3/4/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: cold & clear 6°FTime Offsite: 1500

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☐ Waste Excavation/Relocation  
☐ GCCS Piping

- ☐ Pressure Testing  
☒ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 shut & seal test for liner repairs  
low seal repair near BW 21R  
" " " " BW 71R  
" " " " BW 74R  
1500 continue to find 24"; no CQA  
needed for that so left site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/4/14

Signature of CQA Monitor

Date



# Daily Field Report

Name of Project/Site: LO/2in TL Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Vanet Todia  
Weather: cold 4°F

Project No: 150.0001  
Date: 3/5/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping          | <input type="checkbox"/> Other -                           |

Contractor(s): ABG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 approached by Jeff Reid to  
repair leachate vault near EOT  
plant  
discovered broken PVC "T" in vault;  
replaced & retrofit w/ 3" PE "T" +  
repair is holding  
worked on vault repair all day

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Signature of CQA Monitor

Date

Vanet Todia 3/5/14





## Daily Field Report

Name of Project/Site: Lorain II Phase 4Project No: 150,0001Project/Site Location: Oberlin, OHDate: 3/6/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: 16°F & sunnyTime Offsite: 1800

## Items Worked On:

☐ Gas Extraction Wells☐ Pressure Testing☐ Gas Extraction Well Abandonment☐ Temporary FML Installation/Repair☐ Waste Excavation/Relocation☐ Stormwater Channels/Structures☒ GCCS Piping☐ Other -Contractor(s): REG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 begin excavation of RW 30 to RW 31R  
24" replacement header, 2" dia & 2' x 4"  
dual, contained free main  
- saturated ground made slow excavation  
- minge hauled dirt & made erosion &  
subsequent repairs from winter construction  
- will watch weather & continue focus on  
24" header replacement tomorrow

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/6/14

Signature of CQA Monitor

Date

**Daily Field Report**

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Tanet Todia  
Weather: 42°F + sunny

Project No: 150.0001  
Date: 3/7/14  
Time Onsite: 0700  
Time Offsite: 1800

**Items Worked On:**

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other                             |

*\*NO WORK IN MONDAY - SATURATED (3/10)*

Contractor(s): ARG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site: safety meeting  
continued 24" replacement header, 12" air  
line, & 2" x 4" dual contained force  
main from BW31R to RW32R  
- minor continued slope & settlement  
repairs from winter construction  
- excavation slow due to saturated ground

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

*Tanet Todia 3/7/14*  
Signature of CQA Monitor Date

**Daily Field Report**

Name of Project/Site: Kolam II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: 34°F & overcast

Project No: 150.0001  
Date: 3/11/14  
Time Onsite: 0700  
Time Offsite: 1700

**Items Worked On:**

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input type="checkbox"/> GCCS Piping                     | <input type="checkbox"/> Other -                           |

Contractor(s): NRG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site, safety meeting  
continue above ground 24" replacement  
header 2" x 4" dual contained 2" air  
line aft above grade due to  
saturated ground conditions; end  
@ 40" next termination point for  
future tie in

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/11/14  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lolima II Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 3/14/14CQA Monitor: Janet TodiaTime Onsite: 0850Weather: windy + cold 16°FTime Offsite: 1530

## Items Worked On:

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells            | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input type="checkbox"/> Waste Excavation/Relocation     | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping          | <input type="checkbox"/> Other -                           |

Contractor(s): REG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0800 rec'd call from Minor it's a good weather day to continue work; has been extremely wet  
0850 arrive on site  
continue trenching 24", 2x4" dual contained & 2" air  
pass & cut through ADS drainage; no waste excavation today yet; will start waste excavation the next work day  
leave site 1530; ARQ asked to repair leachate tank transfer line due to tank pulling away connected

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/14/14  
Signature of CQA Monitor Date



**Daily Field Report**Name of Project/Site: LOCOM II Phase 4Project No: 150.0001Project/Site Location: Obcokin, OHDate: 3/17/14CQA Monitor: Tamara TodiaTime Onsite: 0900Weather: cold + windy 26°FTime Offsite: 1700**Items Worked On:**

Gas Extraction Wells



Pressure Testing



Gas Extraction Well Abandonment



Temporary FML Installation/Repair



Waste Excavation/Relocation



Stormwater Channels/Structures



GCCS Piping



Other -

Contractor(s): ARG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A**Summary of Work:**

0900 arrive on site  
continue excavation of 24" 2"K4" & 2" port  
above grade liner into trash; identify  
waste today  
we'd permission from Reis to jump truck  
line for disposal in active phase  
the scs might cut into two 6" latheals  
demarcate to move them out of the way  
for 24" (scs notified plant); this will  
require small isolation

**Attachments:**

Contractor Report



Field Notes



Other:

Signature of CQA Monitor

Date

Tamara Todia 3/17/14





# Daily Field Report

Name of Project/Site: Lolain II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: sunny + 22°F

Project No: 150.0001  
Date: 3/21/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:



☒ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

☐ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): AEG construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
continue to fuse pipe Long 24" V. 35R2  
6" branch saddle w/ gaskets + 3 1/2" 6"  
lateral trench saddle w/ gaskets  
continue clean up + fusion; will help  
Weaver Boos w/ 6" pipe fusion on  
cell A; called Rusty - will fuse pipe  
on Monday; Weaver not working weekends  
yet  
1700 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/21/14  
Signature of CQA Monitor Date



## Daily Field Report

Name of Project/Site: Lorain II Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 3/24/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: 27°F + sunnyTime Offsite: 1700

## Items Worked On:

- ☒ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

- ☒ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): ARG constructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): advised Willert survey needed for Phase I 2014Alteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
continue excavation of 24" to bring  
it to grade on south  
1130 24" repair run put on air test @  
10 lbs, including aux piping 1/4" branch  
saddle connection - laterals  
330 pm air pressure test 24" PASS  
continue digging a little rock through  
the road until we achieve grade  
Tarp pit prior to leaving & well put  
plan on sandy by for morning tie in  
1700 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/24/14

Signature of CQA Monitor

Date



# Daily Field Report

Name of Project/Site: Worain II Phase 4  
Project/Site Location: Obertlin, OH  
CQA Monitor: Janet Todia  
Weather: overcast - cold 30°F

Project No: 150.0001  
Date: 3/25/14  
Time Onsite: 0700  
Time Offsite: 1900

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): AEGB construction  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site  
0745 continue excavation into road to obtain grade; should be completed today  
continue excavation to middle of road; long day of digging  
deodorize unit working  
1700 put 24" on 3.1% grade & continue backfill  
1900 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/25/14  
Signature of CQA Monitor Date



**Daily Field Report**

Name of Project/Site: Horizon II Phase 4  
Project/Site Location: Oberlin, OH  
CQA Monitor: Janet Todia  
Weather: Overcast + 36° F

Project No: 150.0001  
Date: 3/26/14  
Time Onsite: 0700  
Time Offsite: 1700

**Items Worked On:**

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input checked="" type="checkbox"/> Pressure Testing       |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): ARG Construction; Willett Engineering  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

**Summary of Work:**

0700 arrive on site; safety meeting  
put 2" air + 2" x 4" foam main on  
pressure test; PASS  
continue recoding of reader; looks  
like stops are coming in on radar;  
short day for excavation; continue to  
put + dig pipe through end of the  
day

**Attachments:**

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 3/26/14  
Signature of CQA Monitor Date



# Daily Field Report

Name of Project/Site: Lorain II Phase 4  
Project/Site Location: Obellin, OH  
CQA Monitor: Janet Todia  
Weather: sunny & 35°F

Project No: 158.0001  
Date: 3/31/14  
Time Onsite: 0700  
Time Offsite: 1700

## Items Worked On:

- |                                                                 |                                                            |
|-----------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Gas Extraction Wells                   | <input type="checkbox"/> Pressure Testing                  |
| <input type="checkbox"/> Gas Extraction Well Abandonment        | <input type="checkbox"/> Temporary FML Installation/Repair |
| <input checked="" type="checkbox"/> Waste Excavation/Relocation | <input type="checkbox"/> Stormwater Channels/Structures    |
| <input checked="" type="checkbox"/> GCCS Piping                 | <input type="checkbox"/> Other -                           |

Contractor(s): ARG Construction; Willett Engineering  
Subcontractor(s): N/A  
Visitor(s): N/A  
Phone Call(s): N/A  
Alteration(s): N/A  
Deliveries: N/A

## Summary of Work:

0700 arrive on site  
0730 get Ryan on 2" air & 2" force main  
by 07317 to get out of the way of  
operations  
0800 notify JCS to notify plant of  
derate/isolation to tie in 24" at the  
road end of the repair  
1400 derate plant at road side (north) tie in  
of 24" header repair; final repair of 2"  
2x4" on north side & 6" above grade lateral  
on north end  
1700 leave site

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other.

Janet Todia 3/31/14  
Signature of CQA Monitor Date





## Daily Field Report

Name of Project/Site: Lolain II Phase 4Project No: 150.0001Project/Site Location: Oberlin, OHDate: 4/1/14CQA Monitor: Janet TodiaTime Onsite: 0700Weather: NW 20-50 51°FTime Offsite: 1700

## Items Worked On:

- ☐ Gas Extraction Wells  
☐ Gas Extraction Well Abandonment  
☒ Waste Excavation/Relocation  
☒ GCCS Piping

- ☒ Pressure Testing  
☐ Temporary FML Installation/Repair  
☐ Stormwater Channels/Structures  
☐ Other -

Contractor(s): AE6 ConstructionSubcontractor(s): N/AVisitor(s): N/APhone Call(s): N/AAlteration(s): N/ADeliveries: N/A

## Summary of Work:

0700 arrive on site; safety meeting  
0730 light rain, so we are working on 6" lateral, 3" force main + 2" air from 50R3 to 51R3 to work on the flat; (51R3 had lost vacuum)  
1000 minor is working on south end of 24" replacement header; removing fill above lines for tie in tomorrow  
1400 PASS pressure test on 6" lateral, 2" air, + 3" force main (just in place)  
1700 call Bundick to notify we will depart plant 1st thing tomorrow for final tie in

## Attachments:

- ☐ Contractor Report  
☐ Field Notes  
☐ Other:

Janet Todia 4/1/14

Signature of CQA Monitor

Date



## Daily Field Report

Name of Project/Site: Colerain Tr Phase 4

Project No: 150.0001

Project/Site Location: Oberlin, OH

Date: 4/2/14

CQA Monitor: Janet Todis

Time Onsite: 0700

Weather: Sunny + 55°F

Time Offsite: 1700

### Items Worked On:

- ☒ Gas Extraction Wells
- ☐ Gas Extraction Well Abandonment
- ☐ Waste Excavation/Relocation
- ☒ GCCS Piping

- ☐ Pressure Testing
- ☒ Temporary FML Installation/Repair
- ☐ Stormwater Channels/Structures
- ☐ Other -

Contractor(s): REG Construction

Subcontractor(s): N/A

Visitor(s): N/A

Phone Call(s): N/A

Alteration(s): N/A

Deliveries: N/A

### Summary of Work:

0700 arrive on site; safety meeting  
0730 notify JCS; go notify plant to disrupt  
for south end tie in of the 24" header  
repair; isolation OK'd  
0745 permission to cut line will tie in  
EW30, EW31R + EW32R into new 24"  
1800 liner repair; sheet pile test pass  
continue until completion of 24" header  
repair  
1700 leave site

### Attachments:

- ☐ Contractor Report
- ☐ Field Notes
- ☐ Other:

Janet Todis 4/2/14

Signature of CQA Monitor

Date



## APPENDIX B – Construction Photographs and Description Logs

## 2013 Phase 4 and 2014 Phase 1 GCCS - Construction Certification Report - Photograph Log

| Date       | Photo ID     | Direction | Description                                                                                                                                          |
|------------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/10/2013 | 12 23 13 010 | West      | Excavation of tie in point for 12" header on north slope                                                                                             |
| 12/12/2013 | 12 12 13 064 | Northeast | 12" header installation with brick visible from road crossing (12" CMP) from 50R3 to 12" header                                                      |
| 12/10/2013 | 12 23 13 007 | East      | EW54R2 prior to removal of 6" jumper lateral                                                                                                         |
| 12/10/2013 | 12 23 13 012 | Ground    | 12" header cut for placement of 12" T and Isolation valve                                                                                            |
| 12/10/2013 | 12 23 13 018 | Southeast | New 12" header isolation valve near EW55R                                                                                                            |
| 12/12/2013 | 12 23 13 026 | Northwest | 6" lateral, 2" air line from EW50R3 to 12" header                                                                                                    |
| 12/12/2013 | 12 23 13 031 | South     | Dug a rock sump for leachate drainage near the new 12" header isolation valve                                                                        |
| 12/13/2013 | 12 23 13 057 | Ground    | 12" CMP road crossing; 6" lateral, 2" air, and 4" force main for future tie in to EW327                                                              |
| 12/13/2013 | 12 23 13 065 | East      | 12" fusion machine; welding 12" T to 6" reducer                                                                                                      |
| 12/13/2013 | 12 23 13 066 | Northeast | 12" header being pulled into trench for placement                                                                                                    |
| 12/16/2013 | 12 23 13 071 | North     | Continuation of 12", 4", 2" to round the northwest corner near EW329                                                                                 |
| 12/19/2013 | 12 23 13 094 | Northeast | Set casing on new well EW328                                                                                                                         |
| 12/19/2013 | 12 23 13 095 | Northeast | Number 4 stone installation for new well EW328                                                                                                       |
| 1/15/2014  | SAM 0003     | North     | 12" CMP (road crossing) for 6" remote lateral installation for EW45R3                                                                                |
| 1/15/2014  | SAM 0017     | North     | Installation of 6" well casing in bore for redrill EW303R                                                                                            |
| 1/16/2014  | SAM 0032     | North     | 6" lateral installation and 12" CMP (corrugated metal pipe) road crossing at EW303R                                                                  |
| 1/16/2014  | SAM 0033     | South     | Well casing prior to installation EW333; shows SDR17 6" perforated pipe                                                                              |
| 1/16/2014  | SAM 0042     | North     | 6" T connection at EW307R supplying vacuum to redrilled well EW303R                                                                                  |
| 1/17/2014  | SAM 0049     | Southwest | Completed well EW303R with blue road crossing markers                                                                                                |
| 1/17/2014  | SAM 0059     | Ground    | Proper abandonment of well EW303                                                                                                                     |
| 1/18/2014  | SAM 0067     | North     | Extension of air and force main from EW42R to EW42R2 and proper abandonment of EW42R                                                                 |
| 1/22/2014  | SAM 0084     | Ground    | Cuttings pile from drilling EW327; household trash                                                                                                   |
| 1/23/2014  | SAM 0095     | Northeast | Trenching 6" lateral from new well EW172 to obtain a vacuum source from EW327                                                                        |
| 1/27/2014  | SAM 0104     | Northeast | Installed air and force main isolation valves on east side of GCCS system to trouble shoot potential system pressure loss                            |
| 2/24/2014  | SAM 0138     | North     | Uncover east slope cap area to trouble shoot the source of a 20.0" w.c. (water column) vacuum loss at the request of SCS and the Site                |
| 2/24/2014  | SAM 0141     | East      | Liner repair of east slope trouble shooting area; header was too deep to be excavated in this area; opted to replace entire 24" header on east slope |
| 2/28/2014  | SAM 0144     | Southwest | Supplies for 24" header line replacement to repair 24" vacuum loss                                                                                   |
| 1/21/2014  | SAM 0082     | Southwest | Drilling EW173 and cleaning up of drill cuttings for transfer and disposal in the active phase                                                       |
| 3/6/2014   | SAM 0178     | Northeast | 24" header repair on east side of landfill; 24" header was installed below the pre existing ADS drainage pipe                                        |

[illegible]





Photograph 1. Excavation of tie in point for 12" header on north slope, facing west.



Photograph 2. 12" header installation with brick visible from road crossing (12" CMP) from 50R3 to 12" header, facing northeast.





Photograph 3. EW54R2 prior to removal of 6" jumper lateral, facing east.



Photograph 4. 12" header cut for placement of 12" T and isolation valve.





Photograph 5. New 12" header isolation valve near EW55R, facing southeast.



Photograph 6. 6" lateral, 2" air line from EW50R3 to 12" header, facing northwest.





Photograph 7. Dug a rock sump for leachate drainage near the new 12" header isolation valve, facing south.



Photograph 8. 12" CMP road crossing; 6" lateral, 2" air, and 4" force main for future tie in to EW327.



Photograph 9. 12" fusion machine; welding 12" T to 6" reducer, facing east.



Photograph 10. 12" header being pulled into trench for placement.





Photograph 11. Continuation of 12", 4", 2" to round the northwest corner near EW329, facing north.



Photograph 12. Set casing on new well EW328, facing northeast.



Photograph 13. Number 4 stone installation for new well EW329, facing northeast.



Photograph 14. 12" CMP (road crossing) for 6" remote lateral installation for EW45R3, facing north.





Photograph 15. Installation of 6" well casing in bore for redrill EW303R, facing north.



Photograph 16. 6" lateral installation and 12" CMP (corrugated metal pipe) road crossing at EW303R, facing north.



Photograph 17. Well casing prior to installation EW333; shows SDR17 6" perforated pipe, facing south.



Photograph 18. 6" T connection at EW307R supplying vacuum to redrilled well EW303R, facing north.





Photograph 19. Completed well EW303R with blue road crossing markers, facing southwest.



Photograph 20. Proper abandonment of well EW303.





Photograph 21. Extension of air and force main from EW42R to EW42R2 and proper abandonment of EW42R, facing north.



Photograph 22. Cuttings pile from drilling EW327; household trash.



Photograph 23. Trenching 6" lateral from new well EW172 to obtain a vacuum source from EW327, facing northeast.



Photograph 24. Installed air and force main isolation valves on east side of GCCS system to trouble shoot potential system pressure loss, facing northeast.





Photograph 25. Uncover east slope cap area to trouble shoot the source of a 20.0" w.c. (water column) vacuum loss at the request of SCS and the Site, facing north.



Photograph 26. Liner repair of east slope trouble shooting area; header was too deep to be excavated in this area; opted to replace entire 24" header on east slope.



Photograph 27. Supplies for 24" header line replacement to repair 24" vacuum loss, facing southwest.



Photograph 28. Drilling EW173 and cleaning up of drill cuttings for transfer and disposal in the active phase, facing southwest.





Photograph 29. 24" header repair on east side of landfill; 24" header was installed below the pre existing ADS drainage pipe, facing northeast.



Photograph 30. Tarping the 24" header tie in point to prevent odor and liquid infiltration, facing southwest.





Photograph 31. Placement of 24" replacement header and 2" air line in the trench, facing north.



Photograph 32. Fusion of 24" tie in piece; pictured is SDR17, 24", 90° adapter, facing southwest.



Photograph 33. Fusion of 6" lateral to 24" header at the 6" gusseted branch saddle for EW32R; shows flange connection to pre existing 24" header, facing north.



Photograph 34. 6" lateral fabrication for EW32R off of the 24" replacement header, facing northeast.





Photograph 35. Test panel to create test “bones” for the tensiometer prior to repair of the east side liner.



Photograph 36. F24" header replacement, 2" air line, and 2" x 4" dual contained force main including air isolation valve at EW31R.



## APPENDIX C – Resumes for CQA Certifying Engineer and Monitors



#### Education

University of Cincinnati, BS  
Civil Engineering, 1987

#### Professional Registrations / Affiliations

Licensed Professional  
Engineer in Ohio, Kentucky,  
Illinois, Michigan &  
Pennsylvania  
Ohio Voluntary Action  
Program Certified  
Professional

#### Years in the Industry

25

#### Areas of Expertise

Solid Waste Landfill Design,  
Construction Quality  
Assurance, Property  
Assessment, Environmental  
Compliance, Environmental  
Investigations, Remedial  
Design, Brownfield  
Redevelopment,  
Underground Storage Tank  
Management,  
Stormwater/Wastewater  
Permitting

#### Summary of Qualifications

Mr. DeLaet is a licensed Professional Engineer with 25 years of experience in environmental consulting, specializing in landfill design, construction, closure, auditing, and compliance; remedial investigation and engineering design support to private industry, environmental attorneys, and potentially responsible parties (PRPs) pursuant to their CERCLA (Comprehensive Environmental Response, Compensation and Liability Act), RCRA (Resource Conservation Recovery Act), NPDES (National Pollutant Discharge Elimination System), and/or other state and federal regulatory compliance obligations. He also works closely with senior executives, legal counsel, and regulatory officials to develop and implement cost-effective and innovative remedial strategies to support business and/or property transactions.

Mr. DeLaet has also had responsibility as a technical resources leader, managing professional staff in multiple offices within the Midwest. He directed this multi-disciplined team of engineers, scientists, geologists, statisticians, field technicians, contractors, etc., on the implementation of cost-effective and sustainable solutions for environmental remediation; remediation system OM&M, and Brownfield redevelopment projects throughout the Midwest.

In addition to his technical and project management responsibilities, Mr. DeLaet serves as a Client Service Manager (CSM) for several national private sector clients with active manufacturing facilities and/or legacy sites with a wide range of environmental impairments. Mr. DeLaet acts as a "trusted strategic advisor" to his clients where he (and his team) formulated remedial strategies that align with the clients' business objectives.

#### Construction Quality Assurance (CQA)

**Countywide Landfill Remediation Action, Republic Services, East Sparta, OH.** Certifying Engineering during this USEPA-required project that created complete separation between an 88-acre remediation area and the remainder of the solid waste cells at the facility. This project was necessary due to an ongoing chemical reaction that is believed to be attributed to aluminum dross waste that the facility historically received. The project involved installation of 52 landfill gas wells and associated headers and laterals, relocation of site flares, installation of 24 acres of HPDE geomembrane, construction of two pump stations, and reconstruction/ upgrade of the facility's leachate system to isolate the 88-acre remediation area leachate from the solid waste cells leachate. To document this work, certified four separate CQA certification reports for submittal to various state and federal regulatory agencies.

**Landfill Gas System Expansion at Countywide Landfill, Republic Services, East Sparta, OH.** Certifying Engineering during upgrade/expansion of the facility's landfill gas collection system. This project involved installation of additional gas extraction wells, header and later piping, and condensation sumps for the facility.





## Jeff DELAET, PE

Principal Engineer

**Leachate Collection and Storage System Upgrade at Countywide Landfill, Republic Services, East Sparta, OH.** Certifying Engineer and Project manager during expansion of the facility's leachate collection system. This project was necessary to keep solid waste leachate from contracting to leachate suspect of containing aluminum dross byproducts. The project involved installation of a 500,000-gallon aboveground storage tank, multiple collection manholes, and associated header piping at the facility. Certified the CQA report for submittal to the Ohio EPA.

**New Solid Waste Landfill Cell, Allied Waste Services, Carey, OH.** Project Manager and Certifying Engineer for CQA related activities during construction of an approximately 9-acre horizontal expansion of a solid waste landfill. The project involved monitoring the contractor's quality control activities during installation of structural fill for the landfill cell's sub-base and perimeter berms, recompacted soil layer, 60-mil HDPE geomembrane component of the landfill liner system, and leachate collection. Performed the project under a very compressed schedule to meet an emergency need of the client. Responsible for managing the team of onsite field engineers that monitored installation of the landfill liner system and leachate control system. Also prepared the construction summary report that certified the new cell construction was in accordance with the design plans and technical specifications.

**Vertical Expansion of Solid Waste Landfill, Allied Waste Services, Celina, OH.** Project Manager and Certifying Engineer for CQA-related activities during construction of an approximately 8.5-acre vertical expansion of a solid waste landfill. The project involved monitoring the contractor's quality control activities during installation of structural fill for the landfill cell's sub-base and perimeter berms, recompacted soil layer, and leachate collection system. Responsible for managing onsite field engineers that monitored installation of the landfill liner system and leachate collection system. Also prepared the construction summary report that certified the new cell construction was in accordance with design plans and technical specifications.

**Closure of Hazardous Waste Surface Impoundments, Cynthiana, KY.** Project manager for performing CQA services during closure of two hazardous waste surface impoundments. Work involved in-place stabilization of sludge and contaminated soils and construction of a RCRA cover system over the stabilized impoundments.

**Closure of Hazardous Waste Impoundment, Florence, KY.** Project Manager for performing CQA services during closure of a hazardous waste surface impoundment. Project involved removal and disposal of contaminated soils and backfilling the impoundment with imported clean soil. Responsibilities included evaluating the limits of soil contamination, coordinating field services, and preparing the closure certification report.

**Closure of Hazardous Waste Landfill, Toledo, OH.** Project Engineer for performance of CQA monitoring services for closure of a hazardous waste landfill and installation of a leachate extraction system. This project included construction of a RCRA multi-layer cover of the landfill and installation of a leachate extraction system; e.g., extraction well, UST, and process control building. Generated a summary report to certify the multi-layer cover and installed leachate extraction system was in accordance with design plans and technical specifications.

**Expansion of Solid Waste Landfill, Jackson, TN.** Project Manager for performance of CQA services during installation of geosynthetic components for an approximately 10-acre solid waste landfill expansion. The project involved monitoring the contractor's quality control activities during installation of the 60-mil HDPE geomembrane components of the landfill liner system. Generated a summary report to certify the geomembrane installation was in accordance with the design plans and technical specifications.

**Expansion of Solid Waste Landfill, Jackson, TN.** Project Manager for performance of CQA services during installation of geosynthetic components for an approximately 3.5-acre industrial landfill expansion. The project involved monitoring the contractor's quality control activities during installation of the 60-mil HDPE geomembrane and geosynthetic leachate collection system components of the landfill liner system. Generated a summary report to certify the installations were in accordance with design plans and technical specifications.

**Construction of Residual and Industrial Waste Landfills, KY and FL.** Project manager for performing CQA services during construction of residual and industrial waste landfills and associated stormwater management systems; e.g., sedimentation basin, silt traps, etc. Responsibilities involved monitoring the contractor's quality control activities during



**Jeff DELAET, PE**

Principal Engineer

installation of the engineered clay liner, HDPE geomembrane, leachate collection system, and stormwater sedimentation basin. Due to regulatory deadlines and industrial facility operational constraints at one landfill in Kentucky, 24-hour construction services were necessary during different time periods of the project. Led the team during the continuous construction periods. At the conclusion of each of the construction projects, generated a summary report to certify the various engineered components of the landfill facility installation were in accordance with design plans and technical specifications.

### **Solid Waste Landfill Design**

**Fly Ash Landfill Remedial Design Support, KY.** Project Manager for redesign of a new cell and alternative landfill leachate management structures to collect both leachate from the fly ash landfill and natural springs containing boron-laden groundwater. Responsibilities included development of construction drawings and general construction notes.

**Design of Solid, Industrial, and Construction and Demolition Debris Landfills, OH, FL and NY.** Project Engineer for development of design drawings, technical specifications, operations and maintenance (O&M) plans, surface water management plans, and local/state permits. Also conducted a fatal flaw analysis on two parcels of land identified as potential landfill construction sites. Responsible for site reconnaissance activities, preparation of a conceptual level landfill designs, and capital cost estimates.

**Remedial Design and Permitting for Cover System of Waste Disposal Area, DE and NJ.** Project Manager for coordination of remedial design and permitting efforts associated with construction a multi-layer cover system over a 7-acre waste disposal area within a manufacturing facility. Responsibilities included obtaining local, state, and federal permits; preparation of construction plans and technical specifications and a CQA plan.

# Janet**TODIA**

Landfill Gas Manager



## Years in the Industry

15

## Areas of Expertise

Solid Waste Management, Landfill Gas Systems, Air Compliance, Gas Control and Collection System CQA, Monthly EPA Reports for active dross site landfills

## Summary of Qualifications

Ms. Todia has more than 15 years of experience in the area of Landfill Gas Operations, Maintenance and Compliance. Ms. Todia is an expert in ensuring landfill gas and waste water systems remains in compliance with all federal, state and local laws and regulations. She has adequately performed routine system inspections and repairs on landfills. Her expertise lies in reviewing and understanding all permits governing landfills to ensure compliance has been achieved. She has also reviewed and approved industrial and special waste profiles against applicable rules and regulations to protect landfills and facility personnel.

Ms. Todia has proven success at maintaining relationships with landfill employees, consultants, vendors, customers generating industrial waste. As well as being the primary point of contact with the waste screening protection program and supporting outside sales teams with customer service. Ms. Todia is especially equipped to review all monitoring reports and environmental plans (SPCC, SWPPP, GHG, and Groundwater & Title V) and perform landfill environmental reviews/audits. She understands the intricate details of landfill gas systems and well field technology. She can drive functional plans within the operations group to execute against the business plan to achieve or exceed the business unit's budget and strategic plan to grow the business, and meet or exceed service objectives.

Ms. Todia's ability to define problems, collect/interpret data and draw valid conclusions has enabled her career advancement. An especially valuable asset is Ms. Todia's skill to interpret an extensive variety of technical instructions in mathematical or diagram form, deal with several abstracts and concrete variables.

## Key Projects

**Monthly Operating Reports for Landfill Dross Reaction Sites, Republic Services, Inc., Multiple Sites.** Ms. Todia has assembled monthly reports on behalf of Republic Services for presentation to the State and Federal EPA on dross reaction chemistry and progress. She does this for the following landfills:

- **Leachate Compliance Sampling, Lorain I Landfill, Republic Services, Inc., Lorain, OH.** Ms. Todia has performed leachate sampling according the monthly Waste Water Treatment Plant system requirements per Direct Discharge Permits.
- **Lorain II Landfill, Republic Services, Inc., Lorain, Ohio CQA.** Ms. Todia has performed CQA functions and construction management for Gas Collection and Control System.

**Cuyahoga Regional Sanitary Landfill, Nestle USA, Solon, OH.** Project Manager for landfill gas services to supply a 3.8 megawatt power plant on site and a 72 mmbtu boiler system to Nestle USA. She managed the coordination of field operations with pipeline and compression skid construction activities for the startup of the Nestle Gas-to-Energy Project.

**Hazel Road Landfill, Waste Management, Akron, OH.** Project Manager for landfill gas field services. She assisted field technicians in trouble shooting potential landfill gas migration issues and pneumatic pump installation.



## JanetTODIA

Landfill Gas Manager

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**Hoffman Road Landfill, City of Toledo, Toledo, OH.** Project Manager for landfill gas field services. She managed environmental compliance and reporting and assisted site technicians in small-scale construction repairs, installation of pneumatic pumps, potential site migration issues, and routine well field tuning. She was responsible for routine and non-routine construction budgets. SSM reports, semiannual Title V reports, and annual compliance certifications. She submitted variance requests/alternative timeline requests, and well decommissioning requests.

**Lake County RDF, Waste Management, Chesterland, OH.** Project Manager for small-scale construction repairs, submitted proposals for small-scale construction projects, and coordinated well field compliance with Environmental Specialists, Inc.

**Oakland Heights Development Allied Waste Industries, Inc., Auburn Hills, MI.** Project Manager for a landfill gas project that provides methane to the GM Lake Orion boiler system. She managed budget and non-routine activities and worked with Air Quality Specialists, Inc. to maintain environmental compliance.

**Pine Tree Acres Landfill, Inc., Waste Management, Lenox Township, MI.** Project Manager for well field technicians and aided in routine well field tuning to increase flow to the gas energy plant on site. She worked with Air Quality Specialists, Inc. to maintain environmental compliance.

**Statewide Landfill, Waste Management, Canton, OH.** Project Manager for well field technicians and aided in routine well field tuning, installation of pneumatic pumps, small scale construction repairs, and troubleshooting potential landfill gas migration issues.

**Valley View Landfill, Republic Services, Sulpher, KY.** Supervisor for well field technicians and managed routine and non-routine budgets. She was responsible for environmental compliance reporting.

**Deercroft Recycling and Disposal Facility, Waste Management, Michigan City, IN.** Supervised and prepared semiannual Title V reports, semiannual new source performance standards (NSPS) reports, and semiannual startup, shutdown, and malfunction (SSM) reports. She submitted variance requests/alternative timeline requests, Title V annual compliance certification, and well decommissioning requests and Deviation Occurrence Reports.

**Hazel Road Landfill, Waste Management, Akron, OH.** Project Manager for landfill gas field services. She assisted field technicians in trouble shooting potential landfill gas migration issues and pneumatic pump installation.

**Hoffman Road Landfill, City of Toledo, Toledo, OH.** Project Manager for landfill gas field services. She managed environmental compliance and reporting and assisted site technicians in small-scale construction repairs, installation of pneumatic pumps, potential site migration issues, and routine well field tuning. She was responsible for routine and non-routine construction budgets. SSM reports, semiannual Title V reports, and annual compliance certifications. She submitted variance requests/alternative timeline requests, and well decommissioning requests.

**Lake County RDF, Waste Management, Chesterland, OH.** Project Manager for small-scale construction repairs, submitted proposals for small-scale construction projects, and coordinated well field compliance with Environmental Specialists, Inc.

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**Statewide Landfill, Waste Management, Canton, OH.** Project Manager for well field technicians and aided in routine well field tuning, installation of pneumatic pumps, small scale construction repairs, and troubleshooting potential landfill gas migration issues.





## BILL FOSTER

### **Landfill Cell and Leachate Pond Design, CQA Services, Industrial Waste Facility, Morgantown, KY.**

Design engineer, field engineer and CQA lead for the construction of a 10-acre, double lined industrial waste disposal cell. Cell components included a 36-inch recompacted soil liner, 80-mil textured high-density polyethylene (HDPE) geomembrane, double-sided geocomposite, 80-mil textured HDPE geomembrane, double-sided geocomposite and protective cover. Cell also has a leachate detection and collection system. Observed construction of a 1-acre leachate pond which consisted of a 6-inch recompacted soil liner and a 60-mil textured HDPE geomembrane. Provided soil testing for compaction and moisture utilizing a Troxler Nuclear Density Gauge. Also, provided written and photographic documentation of installation methods, as well as equipment and materials onsite. Reviewed daily paperwork and test results.

**Raw Water Reservoir, CQA Services, Fremont, OH.** Field Engineer and construction quality assurance (CQA) lead for this project that included installation of 94 acres of geosynthetic clay liner (GCL), 40-mil linear low-density polyethylene (LLDPE) geomembrane, and geotextile. Reviewed daily paperwork and test results. Performed compaction testing of structural fill. Prepared the construction certification report for submission and approval by the Ohio Department of Natural Resources (ODNR).

### **Gas, Leachate, and Liner Systems, Design and CQA Services, Solid Waste Facility, East Sparta, OH.**

Provided engineering expertise and served as the construction quality assurance (CQA) lead for this project that included modifications to the existing south slope, the existing leachate collection system, the existing gas collection and control system (GCCS), and the existing temporary flexible membrane liner (FML). These modifications consisted of the:

- Relocation of approximately 142,000 cubic yards of waste
- Replacement of approximately 1,900 feet of toe drain
- Installation of approximately 11,000 feet of high-density polyethylene (HDPE) pipe of various diameters.
- Installation of 5 new extraction wells
- Installation of 11 replacement extraction wells
- Installation of approximately 22 acres of temporary FML

CQA activities included documenting waste relocation, leachate, GCCS, and FML installation, field testing of HDPE pipe and FML, coordination and review of laboratory testing, interpretation of specifications, documentation of all construction activities, documentation of the construction progress and collecting data for an "as-built" construction certification report. Served as liaison between several parties including the US EPA, the Ohio EPA, the contractor, surveyor, pipe manufacturer, liner manufacturer, and the client. Prepared the construction certification report for submission and approval by the Ohio Environmental Protection Agency (Ohio EPA).

Gas and Leachate Systems, Cell Construction, Design and CQA Services, Solid Waste Facility, Findlay Township, Allegheny County, PA. Provided engineering expertise and served as the construction quality assurance (CQA) lead for this \$8 million project to address odors resulting from hydrogen sulfide generation at a landfill located adjacent to an elementary school. Major project elements included the following:

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**BILL FOSTER**

- Installation of 42 acres of 40 mil geomembrane and 16 oz geotextile
- Construction of two new sedimentation ponds
- Expansion of an existing sedimentation pond
- Construction of nearly 20,000 feet of surface water channels
- Installation of 11 surface water culverts
- Installation of nearly 60,000 feet of high-density polyethylene (HDPE) header, lateral, horizontal collector, toe drain, forcemain, and airline piping of various diameters
- Installation of 28 new extraction wells
- Installation of 11 replacement extraction wells
- Construction of a 3.7 acre dual-lined cell

The project involved assistance in developing the design, facilitating the permitting process, overseeing the construction, and providing the construction quality assurance services. Prepared the construction certification reports for submission and approval by the Pennsylvania Department of Environmental Protection for this time critical and substantial corrective action.

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## APPENDIX D – Project Record Drawings





**4675 LAKEHURST COURT  
SUITE 250  
COLUMBUS, OHIO 43016  
TEL 614-539-3380  
WWW.TMANDMSSOCIATES.COM**

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LORAIN COUNTY II LANDFILL

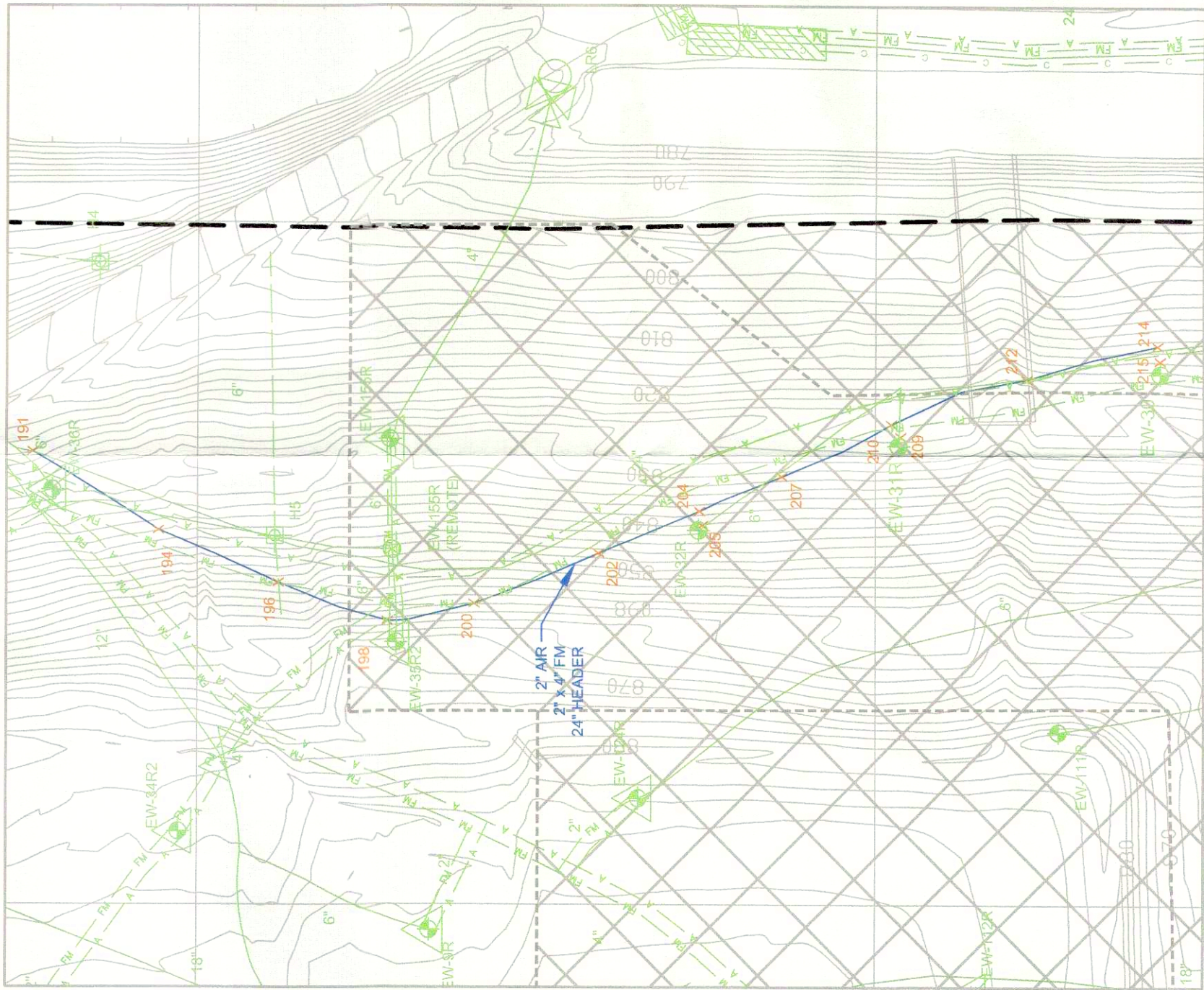
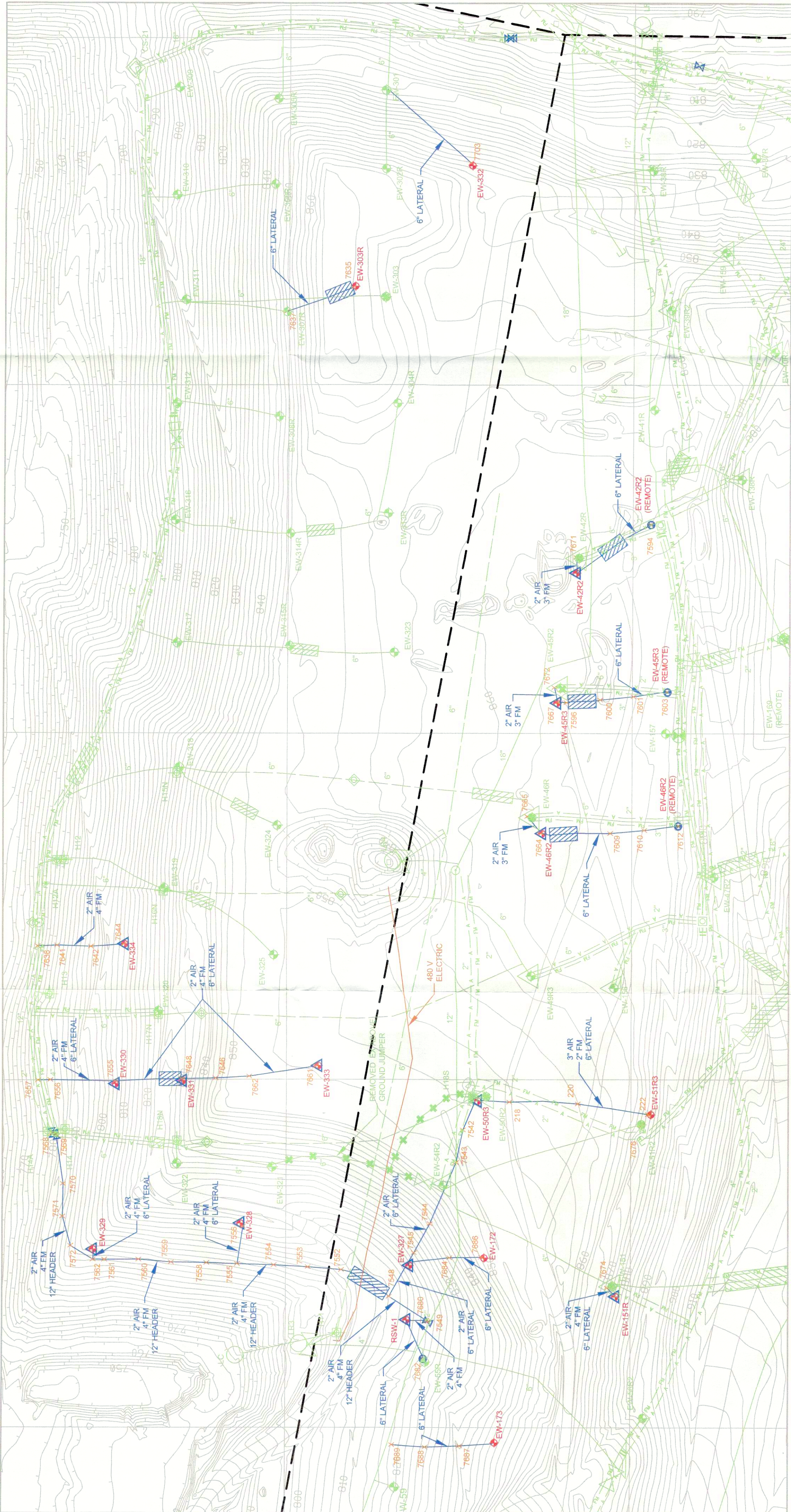


2013 LFG SYSTEM - PHASE 4  
RECORD DRAWINGS - PLAN VIEW

|           |  |                |           |            |
|-----------|--|----------------|-----------|------------|
| NO.       |  | PROJECT NO.    | DATE      | 04/14/2014 |
| DATE      |  | SCALE "1"=100' | CADD FILE |            |
|           |  | DESIGNED BY    | DWG PATH  |            |
|           |  | CHECKED BY     | DRAWN BY  |            |
|           |  |                | BF        |            |
| DRAWING:  |  |                |           |            |
| RD-1      |  |                |           |            |
| REVISIONS |  |                |           |            |
| BY        |  |                |           |            |
| CHECKED   |  |                |           |            |

## LEGEND

- |                   |                                    |                      |                     |                              |                                        |                     |                  |                                 |                                        |                              |                           |                          |                               |                                    |                              |                        |                       |                            |                              |                                  |                                        |                             |                      |         |               |                        |                     |                                |                                          |                                 |                                                     |                 |                     |                             |               |     |     |
|-------------------|------------------------------------|----------------------|---------------------|------------------------------|----------------------------------------|---------------------|------------------|---------------------------------|----------------------------------------|------------------------------|---------------------------|--------------------------|-------------------------------|------------------------------------|------------------------------|------------------------|-----------------------|----------------------------|------------------------------|----------------------------------|----------------------------------------|-----------------------------|----------------------|---------|---------------|------------------------|---------------------|--------------------------------|------------------------------------------|---------------------------------|-----------------------------------------------------|-----------------|---------------------|-----------------------------|---------------|-----|-----|
| PROPERTY BOUNDARY | EXISTING SOLID WASTE CELL BOUNDARY | EXISTING 10' CONTOUR | EXISTING 2' CONTOUR | EXISTING LANDFILL GAS HEADER | EXISTING LANDFILL HORIZONTAL COLLECTOR | EXISTING FORCE MAIN | EXISTING AIRLINE | EXISTING COMMUNICATIONS CONDUIT | EXISTING AREA OF FINAL COVER PLACEMENT | EXISTING LFG EXTRACTION WELL | EXISTING COMBINATION WELL | EXISTING REMOTE WELLHEAD | EXISTING HORIZONTAL COLLECTOR | EXISTING HORIZONTAL COLLECTOR SUMP | EXISTING HEADER ACCESS RISER | EXISTING CONTROL VALVE | EXISTING BLIND FLANGE | EXISTING FLANGE CONNECTION | EXISTING CONDENSATE DRIFPLEG | EXISTING CONDENSATE SUMP STATION | EXISTING SELF DRAINING CONDENSATE TRAP | LANDFILL GAS HEADER/LATERAL | CONDENSATE FORCEMAIN | AIRLINE | ROAD CROSSING | LFG WELL – ABANDONMENT | LFG EXTRACTION WELL | LFG EXTRACTION WELL – RE-DRILL | EXISTING LFG WELL – COMBINATION WELLHEAD | LFG COMBINATION WELL – RE-DRILL | LFG COMBINATION WELL – RE-DRILL W/ 8-IN WELL CASING | REMOTE WELLHEAD | HEADER ACCESS RISER | GAP FOR LATERAL ABANDONMENT | CONTROL VALVE |     |     |
| PL                | ---                                | 10'                  | 2'                  | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| 800               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| 12"               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| 6"                | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| EW-38R            | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| EW-40R2           | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| H6                | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                | ---                             | ---                                    | ---                          | ---                       | ---                      | ---                           | ---                                | ---                          | ---                    | ---                   | ---                        | ---                          | ---                              | ---                                    | ---                         | ---                  | ---     | ---           | ---                    | ---                 | ---                            | ---                                      | ---                             | ---                                                 | ---             | ---                 | ---                         | ---           | --- | --- |
| ---               | ---                                | ---                  | ---                 | ---                          | ---                                    | FM                  | A                |                                 |                                        |                              |                           |                          |                               |                                    |                              |                        |                       |                            |                              |                                  |                                        |                             |                      |         |               |                        |                     |                                |                                          |                                 |                                                     |                 |                     |                             |               |     |     |



- NOTES:
1. LUG EXTRACTION WELLS WERE ABANDONED IN PLACE BY THE FOLLOWING METHOD: EXCAVATED DOWN TO REFUSE, GEOSYNTHETIC COMPONENT OF FINAL COVER SYSTEM OR A MAXIMUM OF 4 FEET, IF NEITHER WAS ENCOUNTERED. EXISTING WELL CASING WAS CUT OFF AND A PVC CAP WAS INSTALLED BY APPLYING A BEAD OF SILICONE SEALANT INSIDE THE CAP AND ATTACHED TO THE WELL CASING WITH 3 LAG SCREWS. ONSITE SOIL BACKFILL WAS USED TO FILL IN AREA TO GROUND SURFACE.
2. THIS MAP HAS BEEN COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY PERFORMED BY COOPER AERIAL SURVEYS CO. DATED JANUARY 9, 2013 AND FROM QUARTERLY AIRSPACE SURVEY PERFORMED BY THE WELLET CORPORATION. VERTICAL DATUM BASED ON NGS MEAN SEA LEVEL. CONTOUR INTERVAL 2 FT. GRID BASED ON LOCAL COORDINATE SYSTEM.

| Point # | North     | Easting    | Elevation | Description                                       |
|---------|-----------|------------|-----------|---------------------------------------------------|
| 191     | 597120.88 | 205981.63  | 820.37    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 192     | 597120.88 | 205981.63  | 820.37    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 194     | 597028.48 | 205977.37  | 834.86    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 196     | 596940.26 | 205974.92  | 849.63    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 198     | 596859.70 | 205970.07  | 860.33    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 200     | 596795.62 | 205972.02  | 857.18    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 202     | 596704.27 | 205975.16  | 843.48    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 204     | 596629.82 | 205978.77  | 834.74    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 205     | 596627.63 | 205977.55  | 836.51    | 6IN 90 @ EW-32R T/PIPE                            |
| 206     | 596659.23 | 205981.33  | 828.67    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 209     | 596481.54 | 205983.49  | 820.84    | 6IN 90 @ EW-31R T/PIPE                            |
| 210     | 596488.47 | 205982.72  | 820.59    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 212     | 596388.89 | 205986.15  | 816.75    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 214     | 596292.46 | 205990.68  | 812.74    | 24IN HDR 2IN AIR 4IN FM 2IN DUAL CONTAINED T/PIPE |
| 215     | 596290.60 | 205989.58  | 813.97    | 6IN 90@ EW-30R T/PIPE                             |
| 218     | 597676.37 | 2059468.16 | 875.25    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 220     | 597577.02 | 2059465.69 | 881.64    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 222     | 597475.15 | 2059450.47 | 909.18    | 6IN 90 @ EW-51R3 T/PIPE                           |
| 223     | 597743.64 | 2059428.49 | 864.52    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 7543    | 59753.38  | 2058381.38 | 855.18    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 7544    | 597791.28 | 2058993.19 | 831.20    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 7545    | 597814.21 | 2059251.17 | 818.44    | 6IN LAT 2IN AIR 2IN FM T/PIPE                     |
| 7548    | 597850.19 | 2058188.42 | 805.71    | 12IN 4.2 A FM                                     |
| 7549    | 597793.51 | 2058152.22 | 814.62    | 12IN ISO VALVE T/PIPE                             |
| 7552    | 597919.59 | 2058276.74 | 803.21    | 12IN HDR 2IN AIR 4IN FM T/PIPE                    |
| 7553    | 597967.90 | 2058230.78 | 801.49    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7554    | 598017.77 | 2058233.35 | 799.32    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7555    | 598070.89 | 2058283.23 | 796.94    | 12IN HDR 6IN LAT 2IN 4IN FM T/PIPE                |
| 7556    | 598062.74 | 2058288.87 | 811.87    | 6IN LAT 2IN AIR 4IN FM 90 T/PIPE                  |
| 7558    | 598115.17 | 2058236.98 | 795.47    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7559    | 598166.49 | 2059237.90 | 793.33    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7560    | 598213.69 | 2059241.93 | 791.42    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7561    | 598263.20 | 2058241.83 | 789.43    | 12IN 2IN AIR 4IN FM T/PIPE                        |
| 7562    | 598280.00 | 2058242.03 | 789.56    | 12IN 2.4 A FM 6IN TEE T/PIPE                      |
| 7568    | 598339.52 | 2058422.96 | 771.22    | 24IN 4IN ISO T/PIPE                               |
| 7569    | 598334.02 | 2058421.15 | 772.91    | 6IN LAT 90 T/PIPE                                 |
| 7570    | 598323.73 | 2058351.12 | 780.50    | 12IN HDR 2IN 4IN FM T/PIPE                        |
| 7571    | 598324.31 | 2058304.07 | 784.24    | 12IN HDR 2IN 4IN FM T/PIPE                        |

| Point # | Northing  | Easting    | Elevation | Description                                        |
|---------|-----------|------------|-----------|----------------------------------------------------|
| 7572    | 598312.64 | 2059321.95 | 787.36    | 12IN HDR 2IN AIR 4IN FM T/PIPE                     |
| 7594    | 597474.85 | 2059300.18 | 884.24    | EW-424R REMOTE T/PIPE                              |
| 7596    | 597595.34 | 2059004.40 | 878.63    | GIN LAT T/PIPE                                     |
| 7600    | 597546.50 | 2059048.41 | 881.70    | GIN LAT T/PIPE                                     |
| 7601    | 597498.33 | 2059053.19 | 883.98    | GIN LAT T/PIPE                                     |
| 7603    | 597449.72 | 2059050.40 | 890.68    | EW-454R REMOTE T/PIPE                              |
| 7609    | 597531.36 | 2058856.19 | 884.05    | GIN LAT T/PIPE                                     |
| 7610    | 597482.10 | 2058860.63 | 883.87    | GIN LAT T/PIPE                                     |
| 7612    | 597432.60 | 2058866.98 | 884.57    | EW-464R REMOTE T/PIPE                              |
| 7635    | 597507.51 | 2059641.88 | 859.66    | GIN 90 T/PIPE                                      |
| 7637    | 598004.22 | 2059606.42 | 846.65    | GIN TEE T/PIPE                                     |
| 7638    | 598360.89 | 2058693.93 | 763.01    | 12IN HDR GIN LAT TEE 4IN FM TEE 2IN AIR TEE T/PIPE |
| 7641    | 598332.68 | 2058695.14 | 776.29    | GIN LAT 2IN AIR 4IN FM T/PIPE                      |
| 7642    | 598283.76 | 2058693.37 | 791.69    | GIN LAT 2IN AIR 4IN FM T/PIPE                      |
| 7643    | 598283.76 | 2058696.83 | 804.43    | GIN LAT 2IN AIR 4IN FM T/PIPE                      |
| 7644    | 598235.96 | 2058696.83 | 804.43    | GIN LAT 2IN AIR 4IN FM T/PIPE                      |
| 7646    | 598102.93 | 2058502.46 | 839.15    | GIN LAT 2IN AIR 4IN FM T/PIPE                      |
| 7648    | 598152.00 | 2058501.60 | 825.00    | GIN LAT 90 T/PIPE                                  |
| 7655    | 598248.51 | 2058498.43 | 801.98    | GIN LAT TEE 4IN FM TEE 2IN AIR TEE T/PIPE          |
| 7657    | 598360.21 | 2058499.92 | 771.22    | GIN LAT 4IN FM 2IN AIR T/PIPE                      |
| 7661    | 597957.87 | 2058518.91 | 863.95    | GIN LAT 4IN FM 2IN AIR 90 T/PIPE                   |
| 7662    | 598054.12 | 2058504.80 | 852.16    | GIN LAT 4IN FM 2IN AIR T/PIPE                      |
| 7664    | 597631.55 | 2058485.46 | 881.18    | 2IN AIR 4IN FM 90 T/PIPE                           |
| 7665    | 597651.56 | 2058890.52 | 879.24    | 2IN AIR 4IN FM 90 T/PIPE                           |
| 7667    | 597608.57 | 2059045.50 | 881.18    | 2IN AIR 4IN FM 90 T/PIPE                           |
| 7671    | 597582.18 | 2059253.52 | 877.97    | 2IN AIR 4IN FM 90 T/PIPE                           |
| 7672    | 597612.96 | 2059066.15 | 878.52    | 2IN AIR 4IN FM 90 T/PIPE                           |
| 7674    | 597533.64 | 2059001.09 | 886.64    | 2IN AIR 4IN FM 6IN LAT 90 T/PIPE                   |
| 7676    | 597483.92 | 2058434.65 | 904.60    | GIN LAT 90 T/PIPE                                  |
| 7680    | 597795.70 | 2058154.17 | 814.78    | 2IN AIR 4IN FM TEE T/PIPE                          |
| 7682    | 597799.80 | 2058099.14 | 816.77    | RSW-1 REMOTE WELL HEAD T/PIPE                      |
| 7684    | 597762.33 | 2058244.47 | 890.58    | GIN LAT T/PIPE                                     |
| 7686    | 597716.04 | 2058245.21 | 844.56    | GIN LAT 90 T/PIPE                                  |
| 7687    | 597746.86 | 2057973.72 | 834.76    | GIN LAT T/PIPE                                     |
| 7688    | 597797.19 | 2057971.82 | 824.62    | GIN LAT T/PIPE                                     |
| 7689    | 597945.44 | 2057975.18 | 814.59    | GIN LAT TO 12IN HDR TEE INT T/PIPE                 |
| 7703    | 597737.22 | 2059820.00 | 844.28    | GIN LAT 2IN AIR 4IN FM 90 T/PIPE                   |



DATED 12/31/13

## 2013 LORAIN LFG SYSTEM WELL SCHEDULE - PHASE 4 FINAL WELLS SCHEDULE

| WELL ID | 8" WELL CASING | INSTALL PUMP | BORE SEAL |
|---------|----------------|--------------|-----------|
| EW-282  |                | X            |           |
| EW-4583 | X              | X            |           |
| EW-4682 |                | X            |           |
| EW-5083 | X              | X            |           |
| EW-172  |                |              |           |
| EW-173  |                |              |           |
| EW-301R |                | X            |           |
| EW-303R |                |              |           |
| EW-327  |                | X            | X         |
| EW-328  |                | X            | X         |
| EW-329  |                | X            | X         |
| EW-330  |                | X            | X         |
| EW-331  |                | X            | X         |
| EW-332  |                |              |           |
| EW-333  |                | X            |           |
| EW-334  |                | X            |           |

| WELL ID | NORTHING | EASTING (FT) | APPROX SURFACE ELEVATION (FT) | BOREHOLE DEPTH (FT) | PERFORATED | PIPE LENGTH (FT)  | THICKNESS OF GRAVEL PACK (FT) |
|---------|----------|--------------|-------------------------------|---------------------|------------|-------------------|-------------------------------|
|         |          |              | GROUND SURFACE                | BOTTOM OF BOREHOLE  | SOLID WALL | ABOVE GRADE RISER |                               |
| EW-082  | 597.581  | 2,039,279    | 884                           | 108                 | 87         | 30                | 50                            |
| EW-083* | 597.608  | 2,039,043    | 884                           | 110                 | 89         | 30                | 50                            |
| EW-082  | 597.608  | 2,038,855    | 885                           | 770                 | 94         | 30                | 97                            |
| EW-083* | 597.723  | 2,038,470    | 876                           | 773                 | 90         | 30                | 81                            |
| EW-083* | 597.471  | 2,038,450    | 913                           | 120                 | 99         | 20                | 102                           |
| EW-151R | 597.522  | 2,038,188    | 886                           | 775                 | 111        | 30                | 93                            |
| EW-172  | 597.711  | 2,038,244    | 849                           | 774                 | 55         | 30                | 57                            |
| EW-173  | 597.695  | 2,037,977    | 847                           | 775                 | 51         | 30                | 54                            |
| EW-030R | 597.903  | 2,039,643    | 861                           | 750                 | 90         | 20                | 93                            |
| EW-031R | 597.880  | 2,039,323    | 812                           | 775                 | 21         | 15                | 30                            |
| EW-329  | 598.237  | 2,038,279    | 812                           | 775                 | 21         | 15                | 24                            |
| EW-329  | 598.237  | 2,038,279    | 798                           | 759                 | 23         | 15                | 26                            |
| EW-330  | 598.246  | 2,038,495    | 805                           | 756                 | 33         | 15                | 36                            |
| EW-331  | 598.149  | 2,038,499    | 828                           | 755                 | 52         | 20                | 55                            |
| EW-332  | 597.736  | 2,039,816    | 847                           | 790                 | 37         | 36                | 39                            |
| EW-333  | 597.952  | 2,038,520    | 867                           | 800                 | 67         | 46                | 70                            |
| EW-334  | 598.234  | 2,038,698    | 807                           | 754                 | 32         | 20                | 35                            |
|         |          |              |                               | 53                  | 32         | 20                | 33                            |
|         |          |              |                               | 1336                | 999        | 320               | 51                            |
|         |          |              |                               | TOTAL               |            | 1050              |                               |

**NOTES:**

- (\*) SYMBOL INDICATES 8" WELL
- WELL DEPTHS BASED ON SURVEY INFORMATION PROVIDED BY WELLERT CORPORATION, DATED 12/12/13 AND 12/31/13, AND  
BASE GRADES PROVIDED BY BROWN & CALDWELL, DATED 11/29/12.

DESIGN FIRM QA/QC REVIEWER ACKNOWLEDGEMENT:

DESIGN FIRM PROJECT MANAGER ACKNOWLEDGEMENT:

ENVIRONMENTAL MANAGER

COA INSPECTOR-

SURVEYOR ACKNOWLEDGEMENT:

### DRILLER ACKNOWLEDGEMENT:

DATE \_\_\_\_\_

UNDER NO CIRCUMSTANCES SHALL DRILLING ACTIVITIES BEGIN WITHOUT PROVIDING THE ABOVE SIGNATURES. ANY CHANGES TO WELL LOCATIONS OR DEPTHS SHALL REQUIRE THESE SIGNATURES TO BE OBTAINED AGAIN.

## SURVEY TIE-IN LOCATIONS

| POINT NUMBER | NORTHING | EASTING   | DESCRIPTION       |
|--------------|----------|-----------|-------------------|
| 1            | 598,330  | 2,038,425 | 12" HEADER NORTH  |
| 2            | 598,357  | 2,038,498 | EW-330 6" LATERAL |
| 3            | 597,852  | 2,057,974 | EW-173 6" LATERAL |
| 4            | 597,785  | 2,038,160 | 12" HEADER SOUTH  |
| 5            | 597,411  | 2,038,865 | EW-46R2 AIR/PM    |
| 6            | 597,429  | 2,059,047 | EW-45R3 AIR/PM    |
| 7            | 597,453  | 2,059,672 | EW-42R2 AIR/PM    |
| 8            | 598,359  | 2,038,425 | EW-334 6" LATERAL |

## WELL BORE SEAL DETAIL 4

NOT TO SCALE

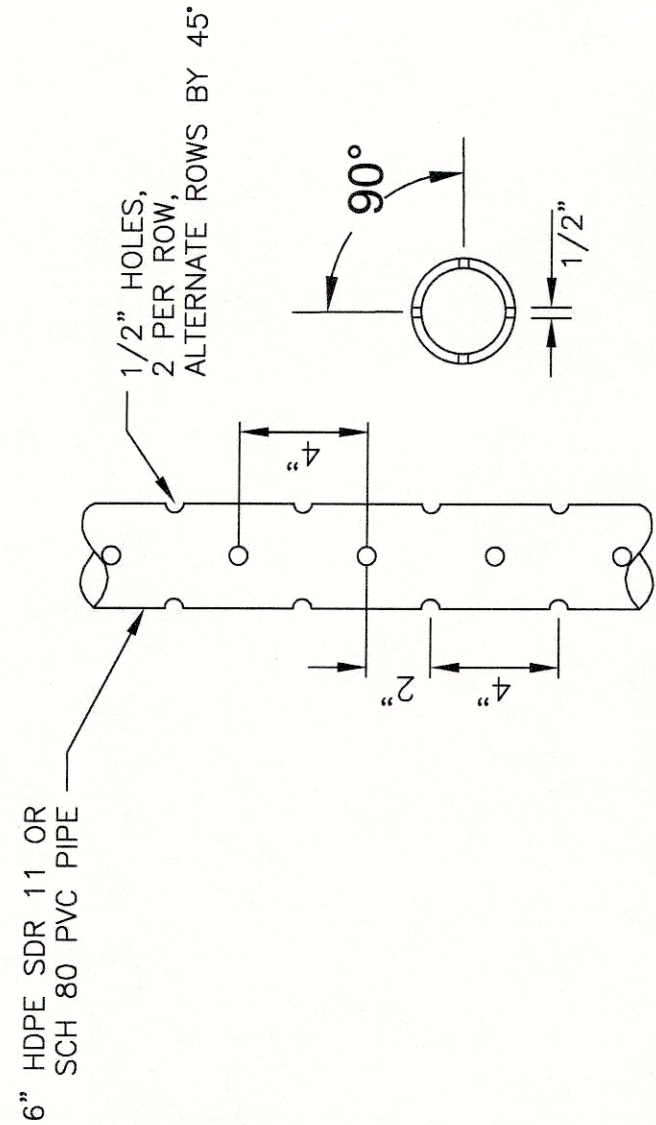
1. BORE SEALS TO BE INSTALLED AT EW-327, EW-328, EW-329 & FW-330

## LFG EXTRACTION WELL DETAIL

**NOT TO SCALE**

NOTES:

1. ALL PROPOSED WELL LOCATIONS AND THE EXISTING GROUND SURFACE ELEVATION SHALL BE SURVEYED AT EACH LOCATION AND PROVIDED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WELL DRILLING.
2. THE ENGINEER SHALL ADJUST WELL SCHEDULE AS NECESSARY BASED ON THE PRE-CONSTRUCTION SURVEY.
3. ALL SIGNATURES REQUIRED ON THE FINAL WELL SCHEDULE PRIOR TO COMMENCEMENT OF DRILLING.

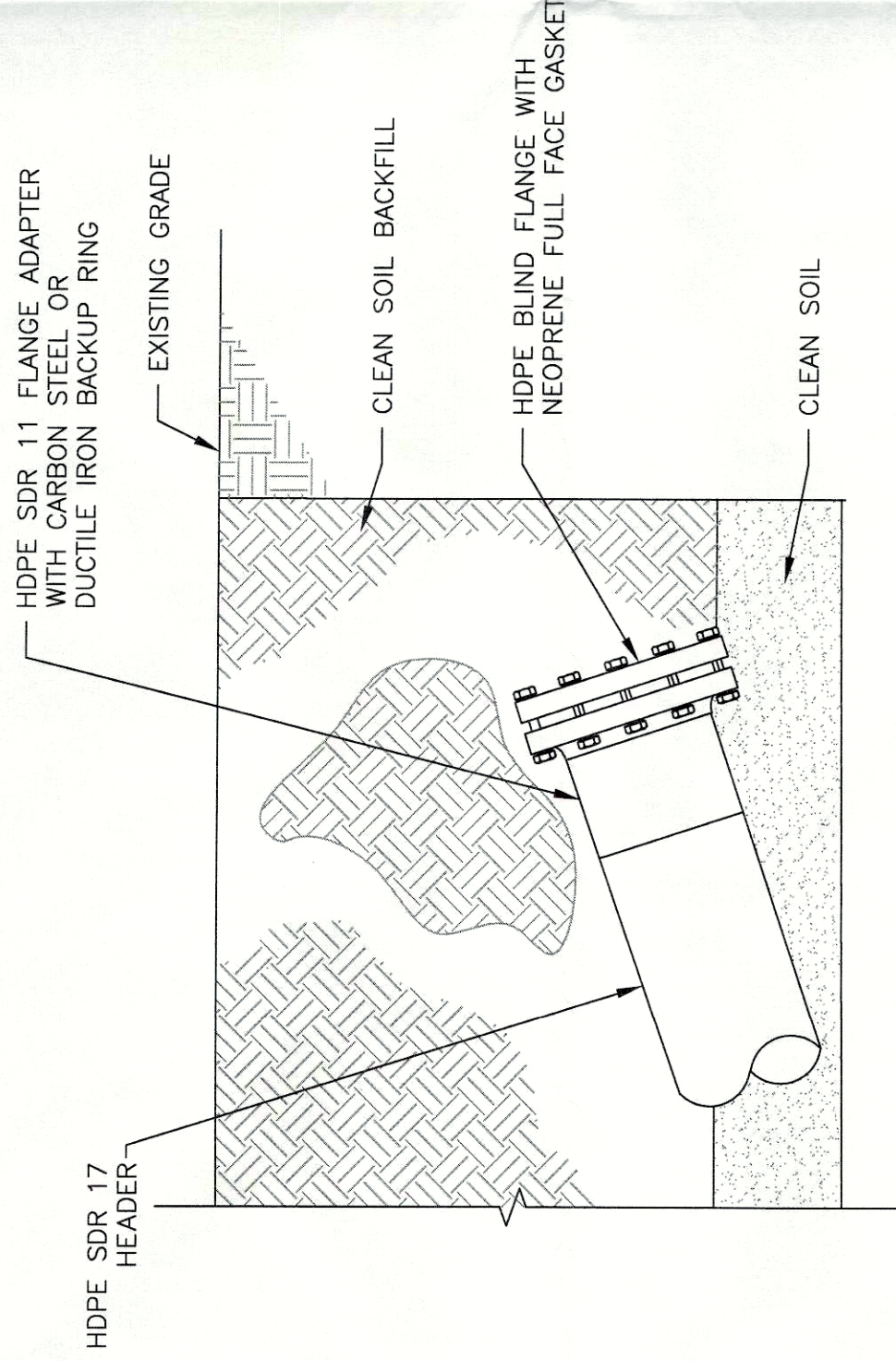


## NOTES:

1. PERFORATIONS SPACED 90° APART HORIZONTALLY.
2. PERFORATIONS SPACED 4" APART VERTICALLY.
3. 90° AND 270° ROWS STAGGERED 2" BELOW 0° AND 180° ROWS.

## PERFORATED PIPE DETAIL 2

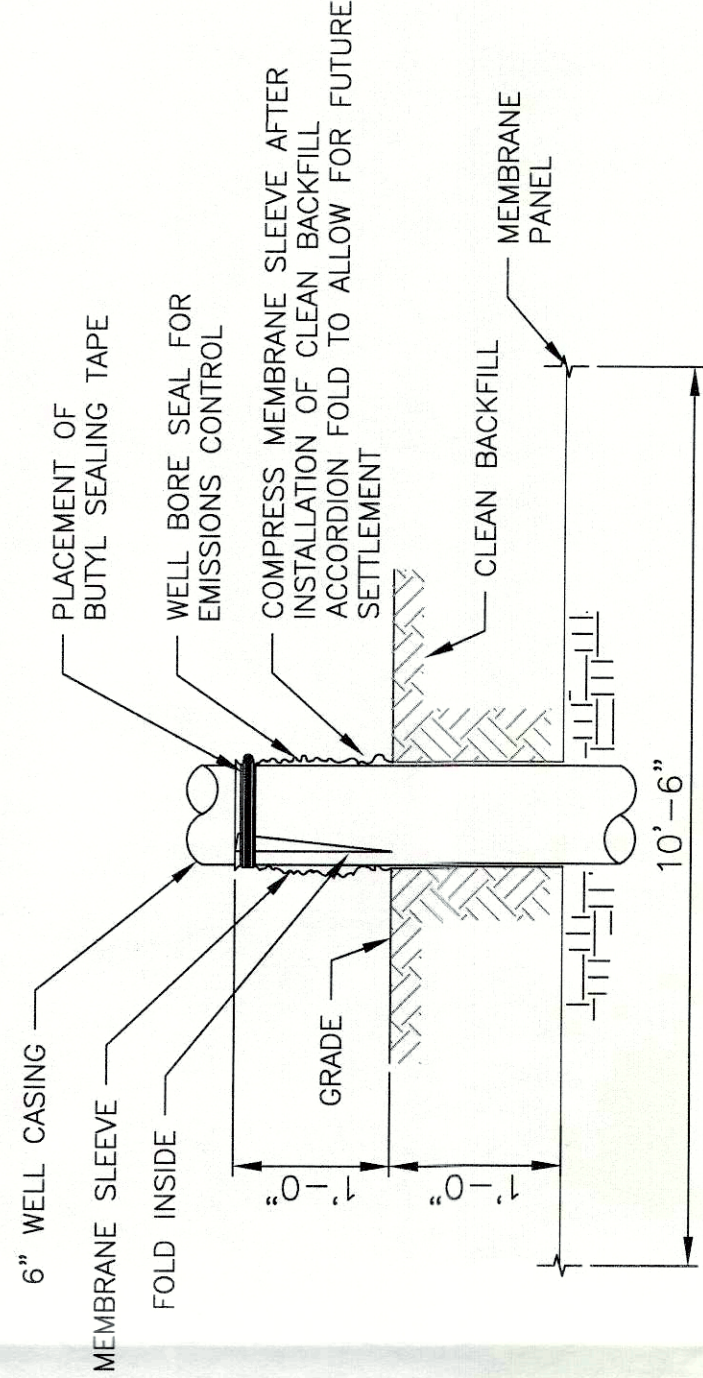
**NOT TO SCALE**



**BURIED BLIND FLANGE FOR  
FUTURE EXPANSION DETAIL**

NOT TO SCALE

1. NUTS, BOLTS, AND WASHERS SHALL BE HOT-DIP GALVANIZED. STAINLESS STEEL BOLTS AND NUTS WILL NOT BE PERMITTED.
2. THOROUGHLY COAT ENTIRE SURFACE OF BOLTS, WASHERS, NUTS AND BACKUP RINGS WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING NUTS. WRAP FLANGE IN PLASTIC WRAP PRIOR TO BACKFILLING.
3. INSTALL CONJENSE WITH THE PROPER SLOPE TO PROVIDE FOR FUTURE CONJENSE DRAINAGE.

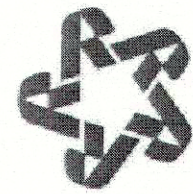


## FINAL COVER SYSTEM DETAILS 5

NOT TO SCALE

- NOTES:

**LORAIN COUNTY II LANDFILL  
2013 LFG SYSTEM CONSTRUCTION - PHASE 4  
DETAILS - WELL SCHEDULE**



**REPUBLIC  
SERVICES**



**BEL**  
**ENVIRONMENTAL**  
**ENGINEERING**

DATE: 10/10/13 FOR BIDDING PURPOSES ONLY DRAWING:

PROJECT NUMBER

DESCRIPTION

DESCRIPTION

DESCRIPTION

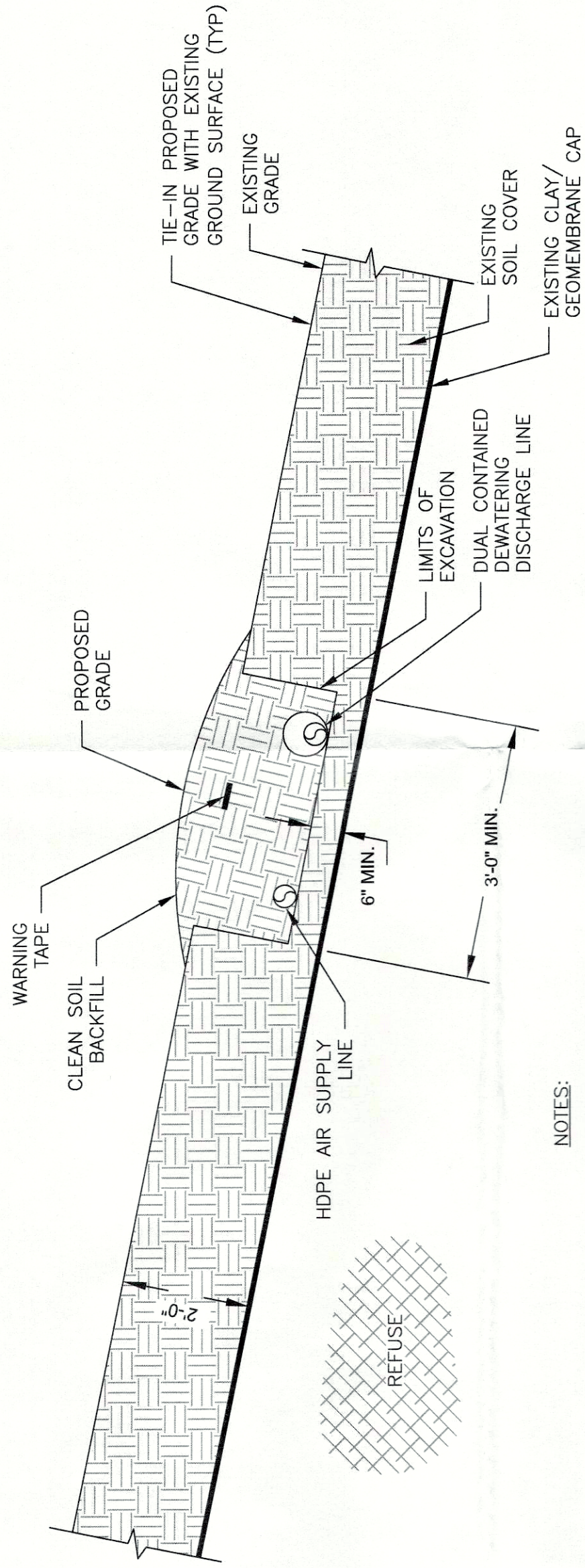
6 OF

OF





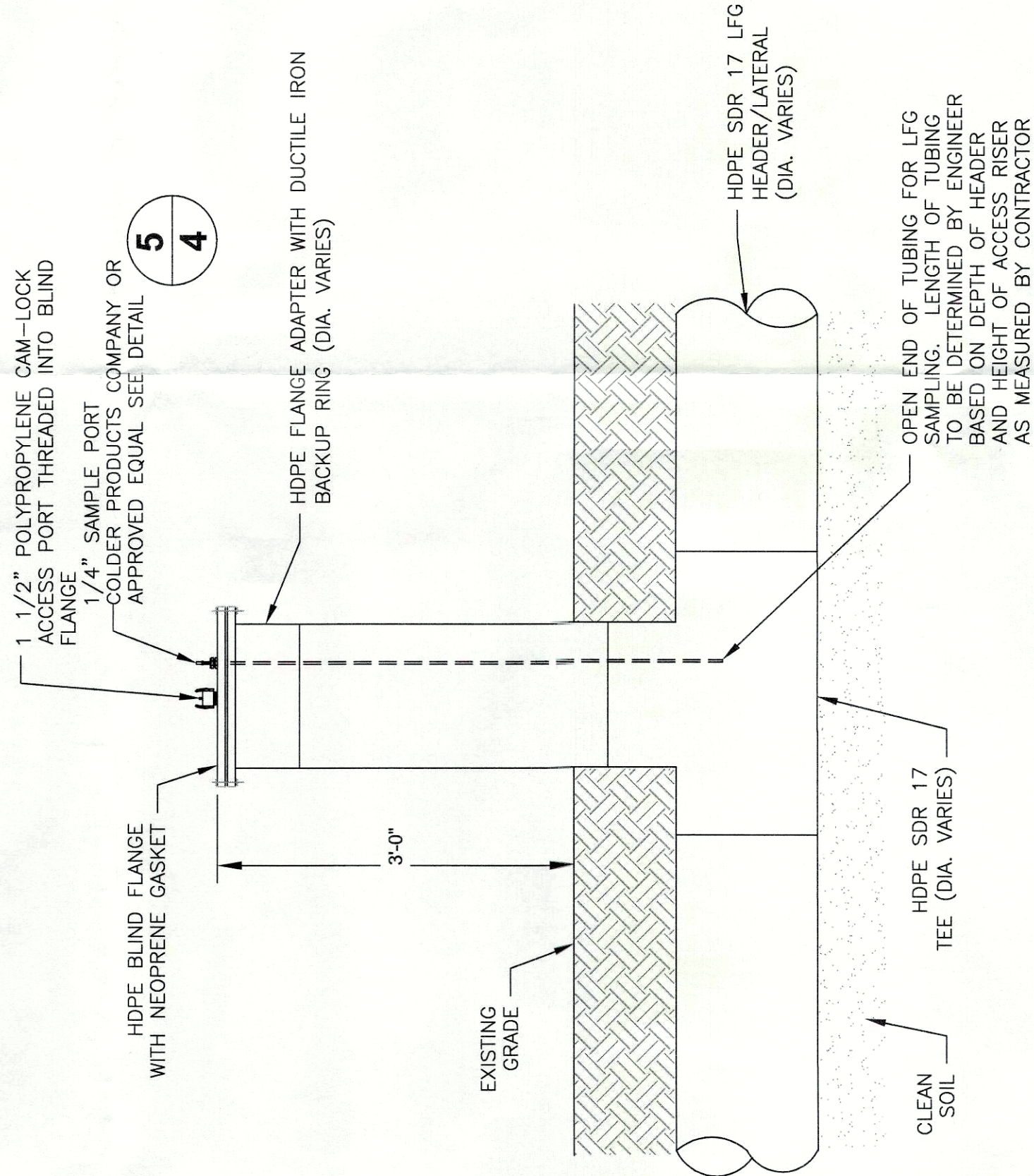




- NOTES:
1. IN AREAS WHERE CLAY/GEOMEMBRANE FINAL CAP HAS BEEN CONSTRUCTED, HEADER/LATERAL SHALL BE INSTALLED ABOVE EXISTING GEOMEMBRANE CAP.
  2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO GEOMEMBRANE CAP AND SHALL REPAIR TO ENGINEER'S SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.

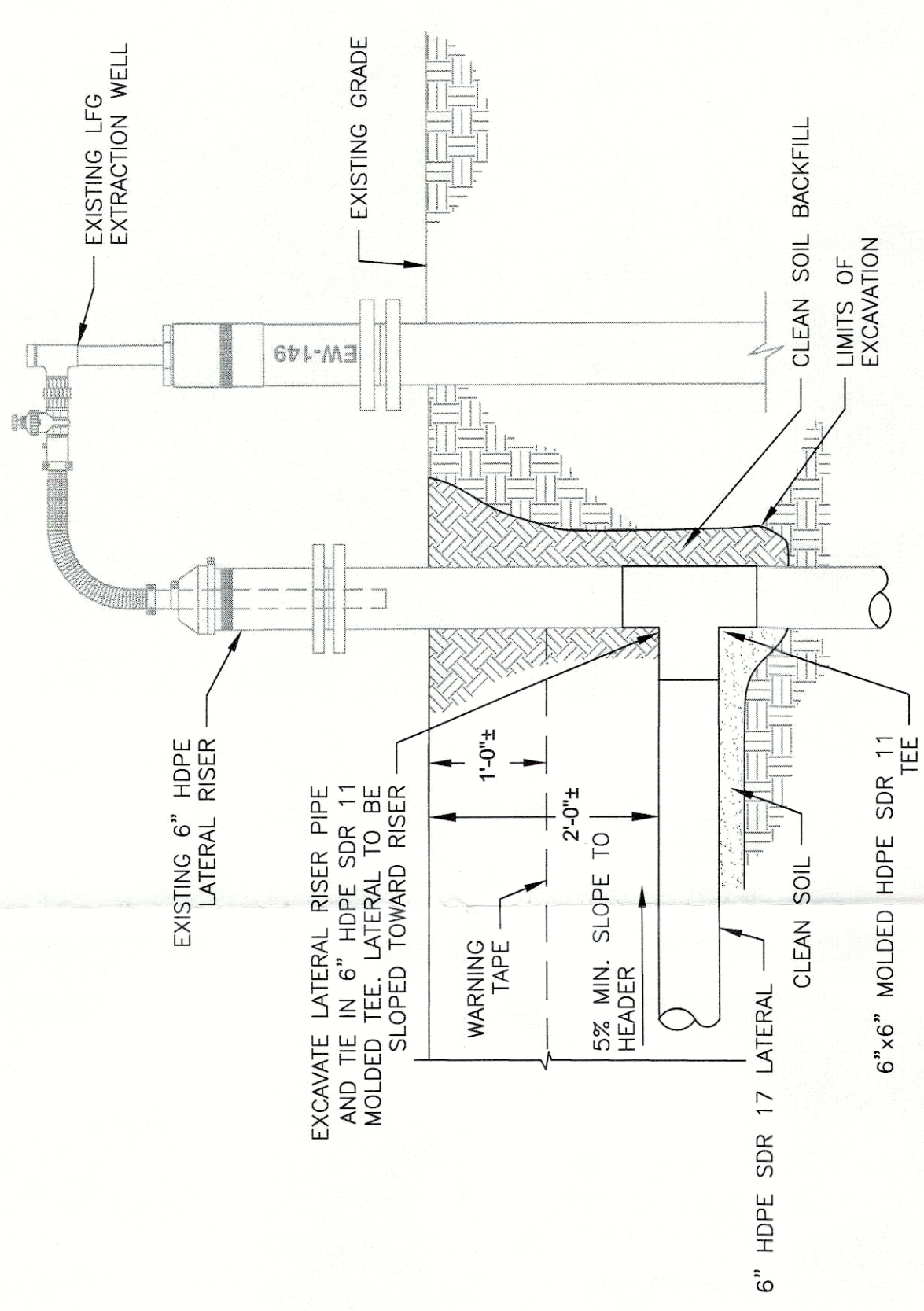
**AIR & FORCEMAIN  
INSTALLATION ABOVE CAP DETAIL** 1  
4

NOT TO SCALE



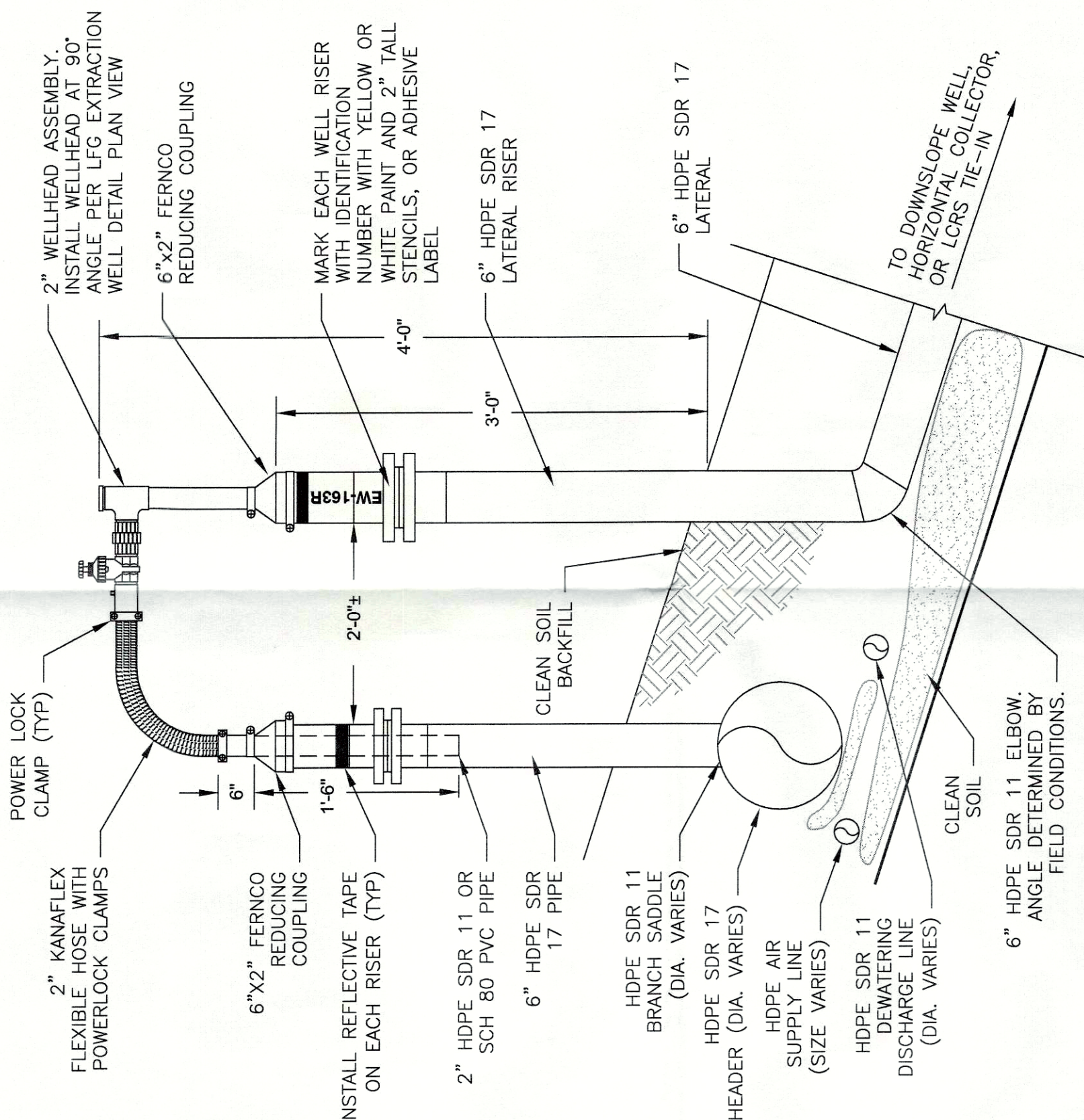
**ACCESS RISER DETAIL** 4  
4

NOT TO SCALE



**TIE-IN TO EXISTING LATERAL RISER** 3  
4

NOT TO SCALE

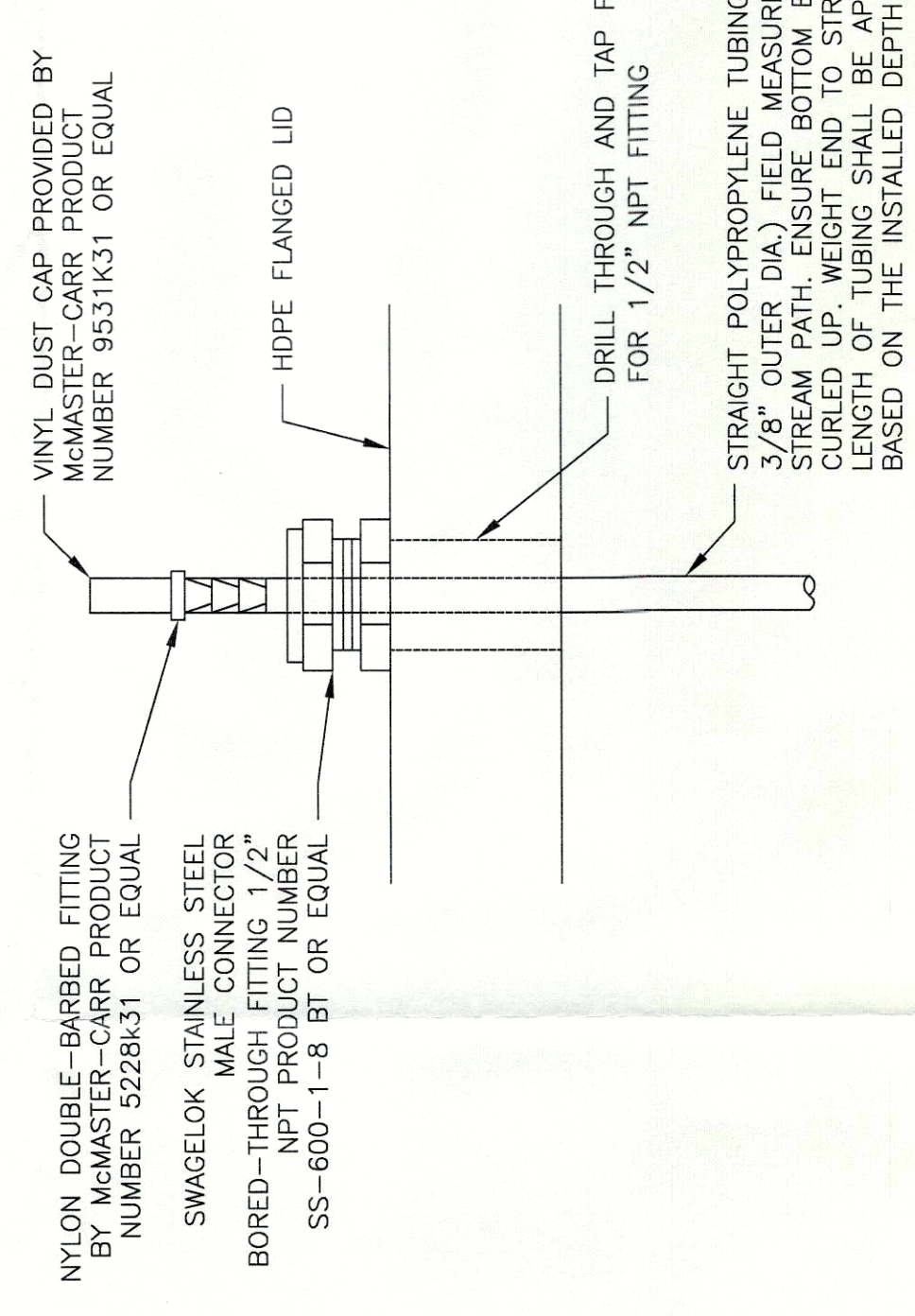


NOTES:

1. MOLDED TEES SHALL BE USED FOR HEADER TIE INS 12"Ø AND SMALLER
2. HDPE BRANCH SADDLES SHALL BE USED FOR TIE INS TO HEADER 14" AND LARGER

**REMOTE WELLHEAD DETAIL** 2  
4

NOT TO SCALE



**MONITORING PORT DETAIL (TYP.)** 5  
4

NOT TO SCALE

# LORAIN COUNTY II LANDFILL

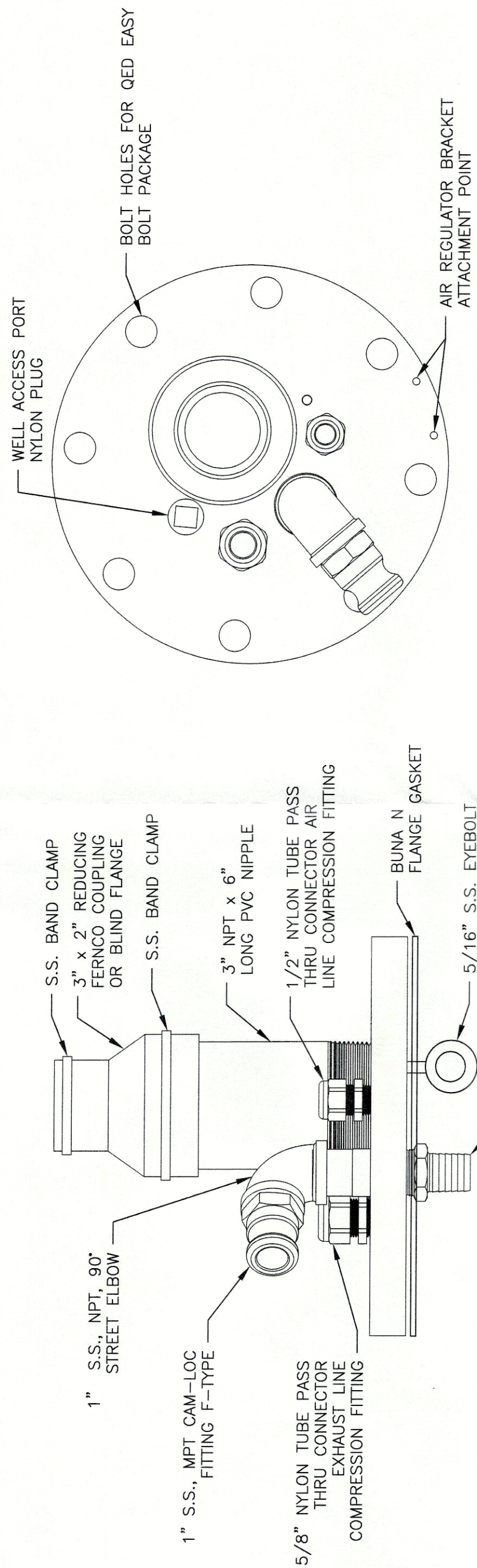
## 2013 LFG SYSTEM CONSTRUCTION - PHASE 4

### DETAILS

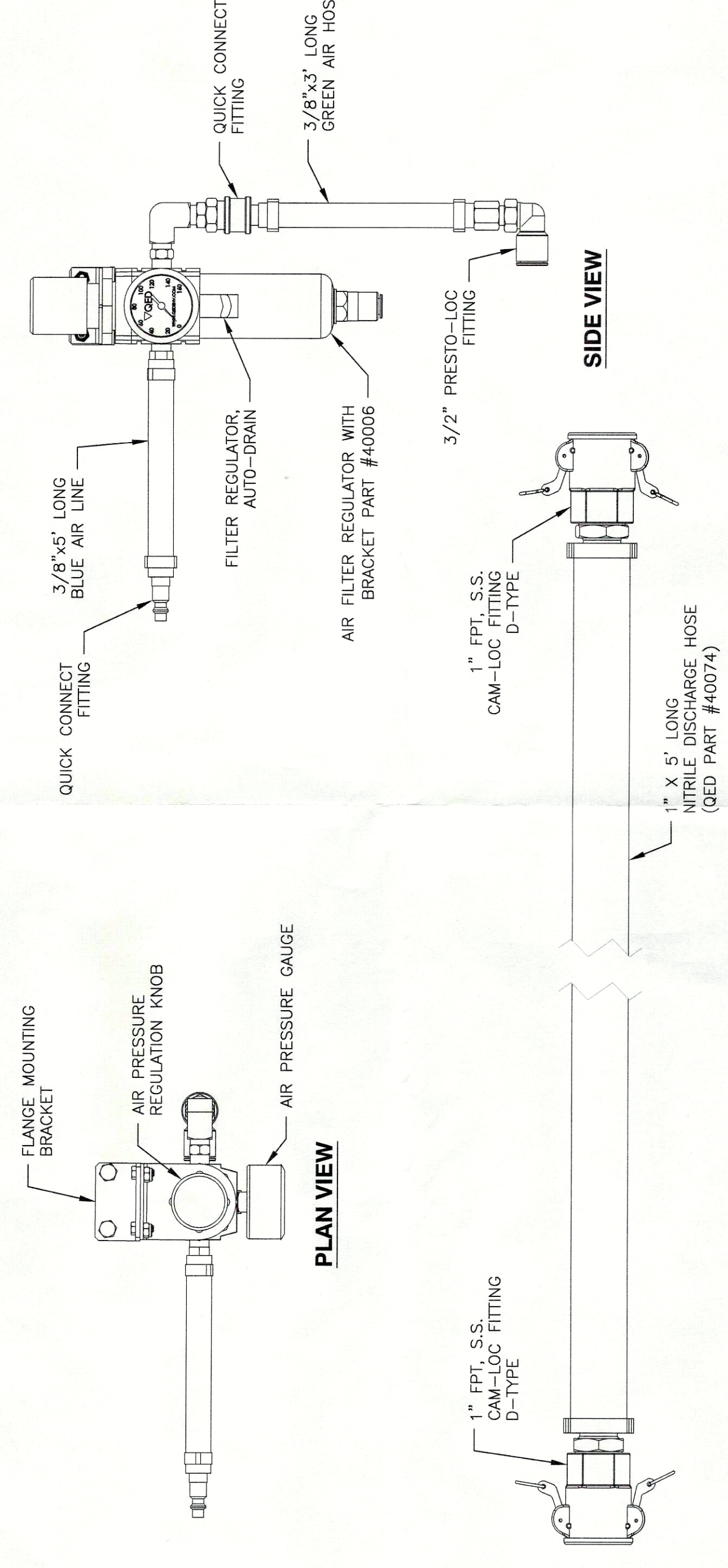


| DATE: 10/4/13 | FOR BIDDING PURPOSES ONLY | DRAWING     |
|---------------|---------------------------|-------------|
| DRAWN BY: CWS | PROJECT NUMBER:           | CK BY:      |
| REV.          | DATE                      | DESCRIPTION |
|               |                           |             |
|               |                           |             |
|               |                           |             |
|               |                           |             |

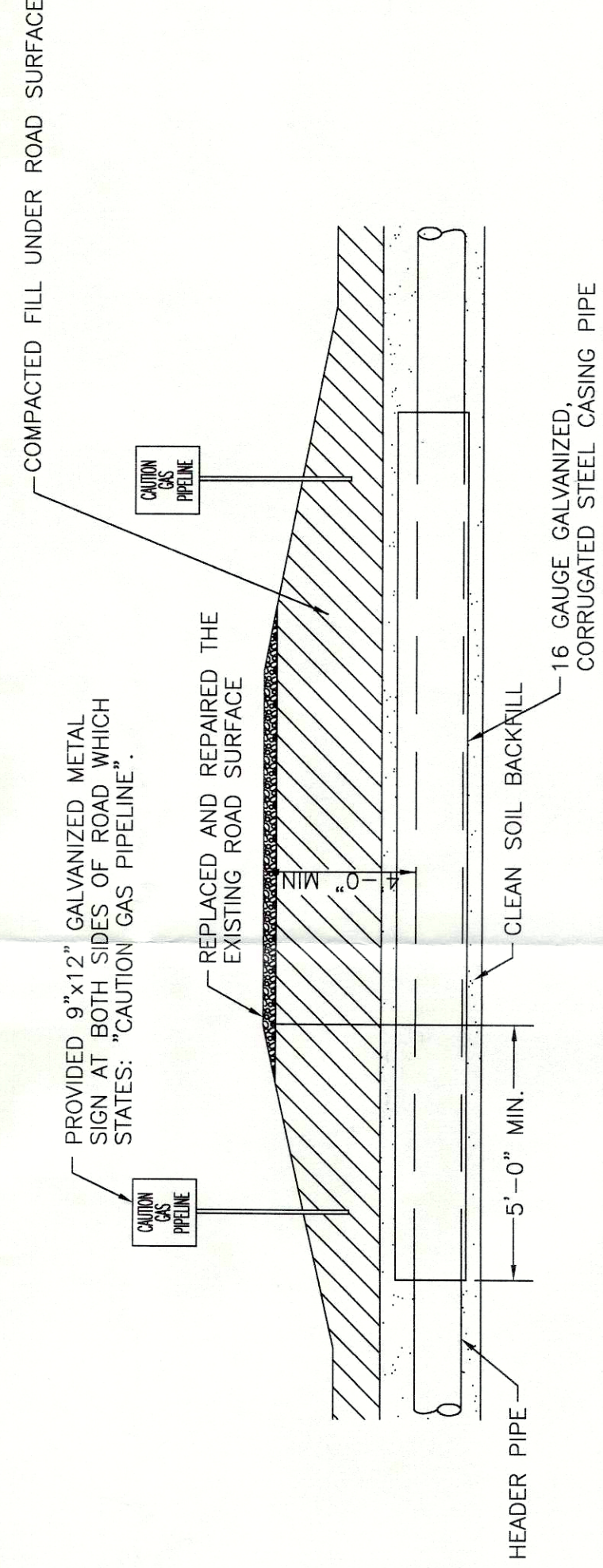




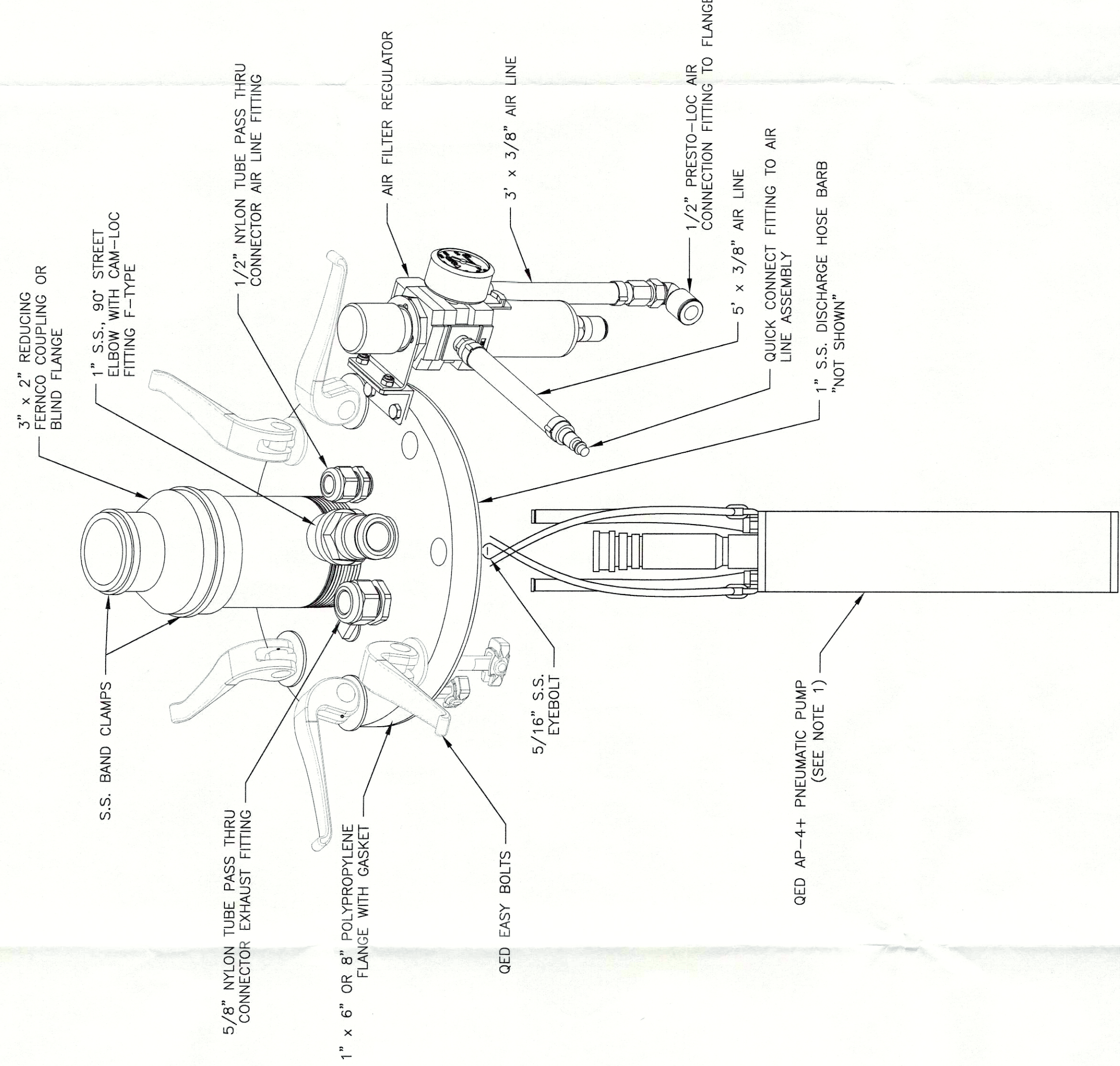
LANDFILL GAS/LEACHATE DUAL EXTRACTION FLANGE COMPONENTS 1 5



LANDFILL GAS/LEACHATE DUAL EXTRACTION WELL AIR REGULATOR & DISCHARGE LINE 2 5

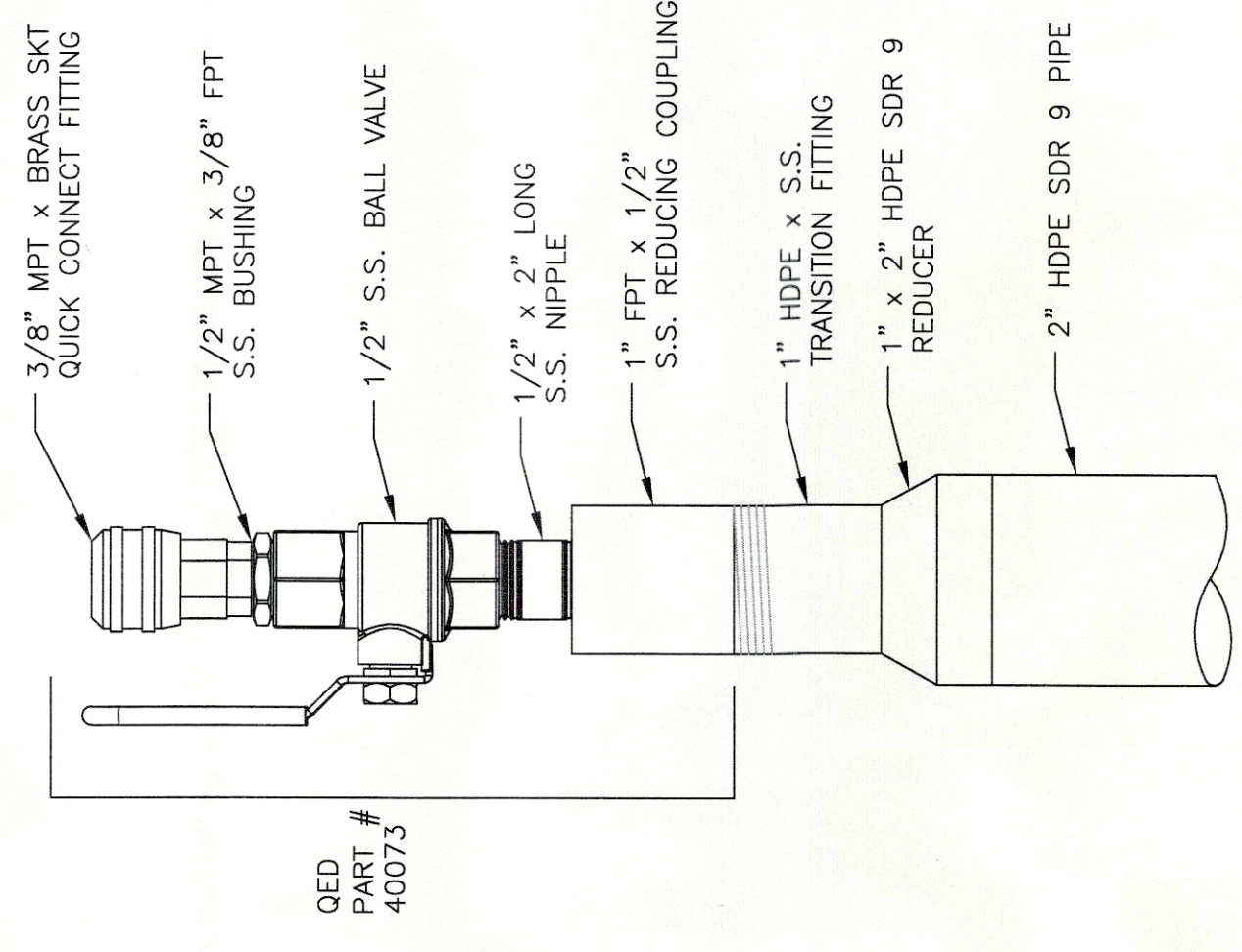
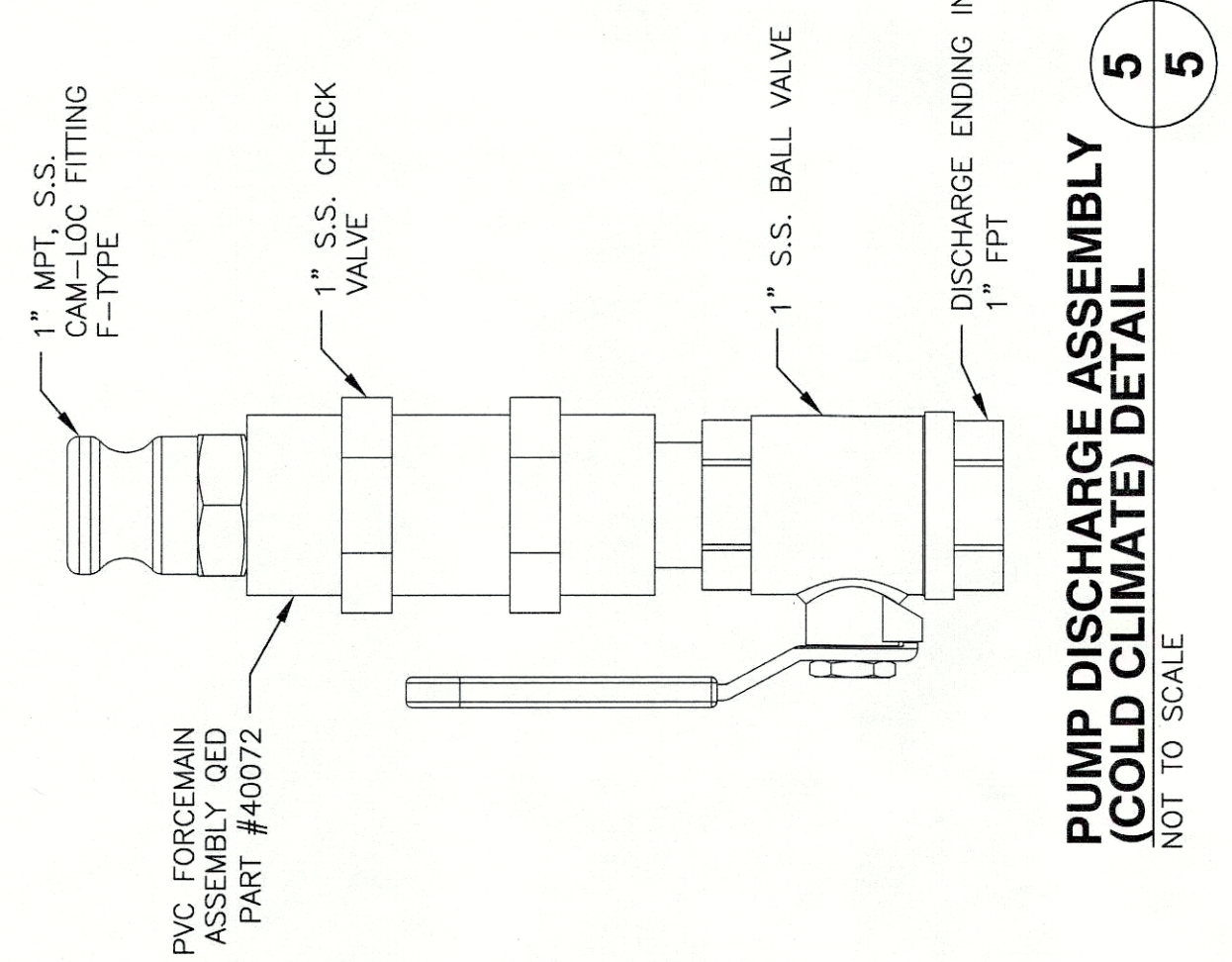


ROAD CROSSING DETAIL 3 5



- NOTES:
- QED AP-44+ PNEUMATIC PUMP SHOWN FOR REFERENCE PURPOSES ONLY. PUMP IS NOT INCLUDED WITH FLANGE PACKAGE.
  - AIR LINE AND FORCE MAIN ASSEMBLIES CAN BE CONFIGURED FOR BOTH COLD AND WARM CLIMATES.

LANDFILL GAS/LEACHATE DUAL EXTRACTION WELL COMPONENTS 4 5



# LORAIN COUNTY II LANDFILL

## 2013 LFG SYSTEM CONSTRUCTION - PHASE 4

### DETAILS



| DATE: 10/4/13 FOR BIDDING PURPOSES ONLY |                 |             |  |
|-----------------------------------------|-----------------|-------------|--|
| DRAWN BY: CWS                           | PROJECT NUMBER: | CK BY:      |  |
| REV.                                    | DATE            | DESCRIPTION |  |
|                                         |                 |             |  |
|                                         |                 |             |  |
|                                         |                 |             |  |

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OHIO EPA NE





## APPENDIX E – Landfill Gas Extraction Well Boring Logs







American  
Environmental  
Group Ltd.

## Well Log

PROJECT NAME LORAIN CO. LANDFILL  
PROJECT# 10-113-130

DATE: 12/18/2013

| Drilling                             | Well Asbuild |
|--------------------------------------|--------------|
| <b>EW-42R2 WELL NUMBER OR NAME</b>   |              |
| <b>108 LINEAR FEET OF DRILLING</b>   |              |
| <b>108 LINEAR FEET OF COMPLETION</b> |              |
| <b>0 LINEAR FEET OF ABANDONMENT</b>  |              |
| Time in: _____ Time out: _____       |              |
| Time in: 6:45AM Time out: 12:45PM    |              |
| Weather conditions: cloudy           |              |
| Site conditions: 20 degrees          |              |
| Rig hrs: 5033                        |              |
| Service: Raidiator Grease            |              |
| EW-42R2 made total depth of 108'.    |              |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 62   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/plastic | mod               | dry                | 81   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/wood    | mod               | dry                | 80   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/plastic | mod               | dry                | 66   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 94   |
| 11:00AM        | 20.9   | 0   | 0        | 50-60           | hht/clay    | mod               | dry                | 89   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           | hht/plastic | mod               | dry                | 93   |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           | hht/metal   | mod               | dry                | 85   |
| 2:00PM         |        |     |          | 80-90           | hht/plastic | mod               | dry                | 89   |
| 3:00PM         |        |     |          | 90-100          | hht/wood    | mod               | damp               | 102  |
| 4:00PM         |        |     |          | 100-108'        | hht/plastic | mod               | damp               | 95   |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 | TD-108'     |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Eric Steen

AEGL SITE SUPERVISOR

December 18 2013

DATE



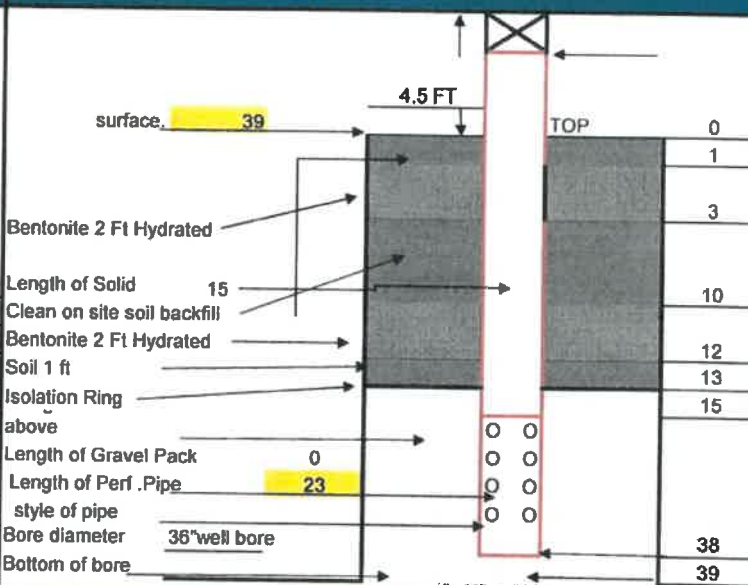
American  
Environmental  
Group Ltd.

## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 12/18/2013

PROJECT# 10-113-130

| Drilling                       |  |                  |  | Well Asbuild                                                                        |  |  |  |
|--------------------------------|--|------------------|--|-------------------------------------------------------------------------------------|--|--|--|
| EW-329 WELL NUMBER OR NAME     |  |                  |  |  |  |  |  |
| 39 LINEAR FEET OF DRILLING     |  |                  |  |                                                                                     |  |  |  |
| 39 LINEAR FEET OF COMPLETION   |  |                  |  |                                                                                     |  |  |  |
| 0 LINEAR FEET OF ABANDONMENT   |  |                  |  |                                                                                     |  |  |  |
| Time in:                       |  | Time out:        |  |                                                                                     |  |  |  |
| Time in: 1:20PM                |  | Time out: 3:00PM |  |                                                                                     |  |  |  |
| Weather conditions: cloudy     |  |                  |  |                                                                                     |  |  |  |
| Site conditions: 22 degrees    |  |                  |  |                                                                                     |  |  |  |
| Rig hrs: 5042                  |  |                  |  |                                                                                     |  |  |  |
| Service: Raidiator Grease      |  |                  |  |                                                                                     |  |  |  |
| EW-329 made total depth of 39' |  |                  |  |                                                                                     |  |  |  |
| Built a bench for EW-329.      |  |                  |  |                                                                                     |  |  |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |     |          | 1-10            | hht/cover   | mod               | dry                | 53   |
| 7:00AM         |        |     |          | 10-20           | hht/wood    | mod               | dry                | 64   |
| 8:00AM         |        |     |          | 20-30           | hht/metal   | mod               | dry                | 59   |
| 9:00AM         |        |     |          | 30-39'          | hht/plastic | mod               | dry                | 70   |
| 10:00AM        |        |     |          | 40-50           |             |                   |                    |      |
| 11:00AM        |        |     |          | 50-60           |             |                   |                    |      |
| 12:00AM        |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           |             |                   |                    |      |
| 2:00PM         | 20.9   | 0   | 0        | 80-90           |             |                   |                    |      |
| 3:00PM         | 20.9   | 0   | 0        | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          | TD-39'          |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

Eric Steen 12/18/13  
CLIENT REPRESENTATIVE DATE  
Eric A. Tadio COA  
NAME & TITLE

Eric Steen  
AEGL SITE SUPERVISOR

December 18 2013  
DATE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL  
PROJECT# 10-113-130

DATE: 12/19/2013

| Drilling                         | Well Asbuild |
|----------------------------------|--------------|
| EW-328 WELL NUMBER OR NAME       |              |
| 40 LINEAR FEET OF DRILLING       |              |
| 40 LINEAR FEET OF COMPLETION     |              |
| 0 LINEAR FEET OF ABANDONMENT     |              |
| Time in: Time out:               |              |
| Time in: 6:45AM Time out: 8:00AM |              |
| Weather conditions: cloudy       |              |
| Site conditions: 23 degrees      |              |
| Rig hrs: 5043                    |              |
| Service: Raidiator Grease        |              |
| EW-328 made total depth of 40'.  |              |
| We built a bench for EW-328.     |              |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 62   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/wood    | mod               | dry                | 71   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/wood    | mod               | dry                | 80   |
| 9:00AM         |        |     |          | 30-40           | hht/plastic | mod               | dry                | 67   |
| 10:00AM        |        |     |          | 40-50           |             |                   |                    |      |
| 11:00AM        |        |     |          | 50-60           |             |                   |                    |      |
| 12:00AM        |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM         |        |     |          | 70-80           |             |                   |                    |      |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          | TD-40'          |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

Eric Steen 12/19/13  
CLIENT REPRESENTATIVE DATE  
Bret A Tadi CQA  
NAME & TITLE

Eric Steen  
AEGL SITE SUPERVISOR

December 19 2013  
DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 12/19/2013

PROJECT# 10-113-130

| Drilling                                                                             | Well Asbuilt |
|--------------------------------------------------------------------------------------|--------------|
| EW-45R3 WELL NUMBER OR NAME                                                          |              |
| 89 LINEAR FEET OF DRILLING                                                           |              |
| 89 LINEAR FEET OF COMPLETION                                                         |              |
| 0 LINEAR FEET OF ABANDONMENT                                                         |              |
| Time in: Time out:                                                                   |              |
| Time in: 8:35AM Time out: 1:20PM                                                     |              |
| Weather conditions: cloudy                                                           |              |
| Site conditions: 34 degrees                                                          |              |
| Rig hrs: 5045                                                                        |              |
| Service: Raidiator Grease                                                            |              |
| EW-45R3 was called @ a 89' bore depth due to a obstruction.<br>EW-45R3 is a 8" well. |              |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |     |          | 1-10            | hht/cover   | mod               | dry                | 82   |
| 7:00AM         |        |     |          | 10-20           | hht/wire    | mod               | dry                | 94   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/plastic | mod               | dry                | 78   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/plastic | mod               | dry                | 91   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/wood    | mod               | dry                | 89   |
| 11:00AM        | 20.9   | 0   | 0        | 50-60           | hht/metal   | mod               | dry                | 89   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           | hht/wood    | mod               | dry                | 102  |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           | hht/plastic | mod               | dry                | 105  |
| 2:00PM         | 20.9   | 0   | 0        | 80-89'          | hht/metal   | mod               | dry                | 100  |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 | TD-89'      |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE DATE  
  
 NAME & TITLE

Eric Steen  
 AEGL SITE SUPERVISOR

December 19 2013  
 DATE





American  
Environmental  
Group Ltd.

## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/14/2014

PROJECT# 10-113-130

| Drilling                                       | Well Asbuild |
|------------------------------------------------|--------------|
| <b>EW-46R2 WELL NUMBER OR NAME</b>             |              |
| <b>115 LINEAR FEET OF DRILLING</b>             |              |
| <b>115 LINEAR FEET OF COMPLETION</b>           |              |
| <b>0 LINEAR FEET OF ABANDONMENT</b>            |              |
| Time in: <u>8:15AM</u> Time out: <u>4:03PM</u> |              |
| Weather conditions: <u>cloudy</u>              |              |
| Site conditions: <u>34 degrees</u>             |              |
| Rig hrs: <u>5064</u>                           |              |
| Service: <u>Radiator Grease</u>                |              |
| <b>EW-46R2 made total depth of 115'.</b>       |              |

| Monitoring Log |        |      |           | Well Boring Log |             |                   |                    |      |
|----------------|--------|------|-----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S  | LEL / CO  | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |      |           | 1-10            | hht/cover   | mod               | dry                | 63   |
| 7:00AM         |        |      |           | 10-20           | hht/plastic | mod               | dry                | 91   |
| 8:00AM         | 20.9   | 0    | 0         | 20-30           | hht/wood    | mod               | dry                | 87   |
| 9:00AM         | 20.9   | 0    | 0         | 30-40           | hht/plastic | mod               | dry                | 90   |
| 10:00AM        | 20.9   | 0    | 0         | 40-50           | hht/metal   | mod               | dry                | 95   |
| 11:00AM        | 20.9   | 0    | 0         | 50-60           | hht/wire    | mod               | dry                | 99   |
| 12:00AM        | 20.9   | 0    | 0         | 60-70           | hht/wood    | mod               | damp               | 94   |
| 1:00PM         | 20.9   | 1ppm | 17ppm/lel | 70-80           | hht/plastic | mod               | damp               | 92   |
| 2:00PM         | 20.9   | 0    | 0         | 80-90           | hht/wood    | mod               | dry                | 109  |
| 3:00PM         | 20.9   | 0    | 0         | 90-100          | hht/metal   | mod               | damp               | 102  |
| 4:00PM         | 20.9   | 0    | 14ppm/lel | 100-110         | hht/plastic | mod               | dry                | 96   |
| 5:00PM         |        |      |           | 110-115'        | hht/sludge  | very              | wet                | 94   |
| Notes          |        |      |           | TD-115'         |             |                   |                    |      |
|                |        |      |           |                 |             |                   |                    |      |
|                |        |      |           |                 |             |                   |                    |      |
|                |        |      |           |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Eric Steen  
AEGL SITE SUPERVISOR

January 14 2014  
DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/15/2013

PROJECT# 10-113-130

| Drilling                          | Well Asbuild                                                                                                                                                                                                            |   |   |   |    |    |    |    |     |     |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|----|----|----|----|-----|-----|
| EW-303R WELL NUMBER OR NAME       |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 111 LINEAR FEET OF DRILLING       |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 111 LINEAR FEET OF COMPLETION     |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 0 LINEAR FEET OF ABANDONMENT      |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Time in: Time out:                |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Time in: 7:05AM Time out: 1:50PM  |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Weather conditions: Cloudy/sun    |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Site conditions: 25 degrees       |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Rig hrs: 5075                     |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| Service: Raidiator Grease         |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| EW-303R made total depth of 111'. | <table border="1"> <tr><td>0</td></tr> <tr><td>1</td></tr> <tr><td>3</td></tr> <tr><td>15</td></tr> <tr><td>17</td></tr> <tr><td>18</td></tr> <tr><td>20</td></tr> <tr><td>110</td></tr> <tr><td>111</td></tr> </table> | 0 | 1 | 3 | 15 | 17 | 18 | 20 | 110 | 111 |
| 0                                 |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 1                                 |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 3                                 |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 15                                |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 17                                |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 18                                |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 20                                |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 110                               |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |
| 111                               |                                                                                                                                                                                                                         |   |   |   |    |    |    |    |     |     |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 8:00AM         |        |     |          | 1-10            | hht/cover   | mod               | dry                | 61   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/wood    | mod               | dry                | 74   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/plastic | mod               | dry                | 90   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/wood    | mod               | dry                | 95   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 93   |
| 11:00AM        | 20.9   | 0   | 0        | 50-60           | hht/plastic | mod               | dry                | 108  |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           | hht/plastic | mod               | dry                | 92   |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           | hht/wood    | mod               | dry                | 104  |
| 2:00PM         | 20.9   | 0   | 0        | 80-90           | hht/wood    | mod               | dry                | 100  |
| 3:00PM         |        |     |          | 90-100          | hht/metal   | mod               | dry                | 97   |
| 4:00PM         |        |     |          | 100-110         | hht/wood    | mod               | dry                | 100  |
| 5:00PM         |        |     |          | 110-111'        | hht/plastic | mod               | dry                | 94   |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-111'     |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Eric Steen

AEGL SITE SUPERVISOR

1/15/2014

DATE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL  
PROJECT# 10-113-130

DATE: 1/16/2014

| Drilling                         |  | Well Asbuild |  |
|----------------------------------|--|--------------|--|
| EW-332 WELL NUMBER OR NAME       |  |              |  |
| 57 LINEAR FEET OF DRILLING       |  |              |  |
| 57 LINEAR FEET OF COMPLETION     |  |              |  |
| 0 LINEAR FEET OF ABANDONMENT     |  |              |  |
| Time in: Time out:               |  |              |  |
| Time In: 6:30AM Time out: 9:05AM |  |              |  |
| Weather conditions: cloudy       |  |              |  |
| Site conditions: 22 degrees      |  |              |  |
| Rig hrs: 5085                    |  |              |  |
| Service: Radiator Grease         |  |              |  |
| EW-332 made total depth of 57'.  |  |              |  |

| Monitoring Log            |        |     |          | Well Boring Log |             |                   |                    |      |
|---------------------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time                      | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM                    | 20.9   | 0   | 0        | 1-10            | hh/cover    | mod               | dry                | 75   |
| 7:00AM                    | 20.9   | 0   | 0        | 10-20           | hh/metal    | mod               | dry                | 98   |
| 8:00AM                    | 20.9   | 0   | 0        | 20-30           | hh/plastic  | mod               | dry                | 103  |
| 9:00AM                    | 20.9   | 0   | 0        | 30-40           | hh/plastic  | mod               | dry                | 90   |
| 10:00AM                   |        |     |          | 40-50           | hh/wood     | mod               | dry                | 69   |
| 11:00AM                   |        |     |          | 50-57'          | hh/wood     | mod               | dry                | 83   |
| 12:00AM                   |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM                    |        |     |          | 70-80           |             |                   |                    |      |
| 2:00PM                    |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM                    |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM                    |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM                    |        |     |          | 110-120         |             |                   |                    |      |
| Notes                     |        |     |          |                 |             |                   |                    |      |
| BUILT A BENCH FOR EW-332. |        |     |          |                 | TD-57'      |                   |                    |      |

Eric Steen 1/16/14  
CLIENT REPRESENTATIVE DATE  
Janet A. Tadio CAA  
NAME & TITLE

Eric Steen 1/16/2014  
AEGL SITE SUPERVISOR DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/16/2014

PROJECT# 10-113-130

| Drilling                       |                  | Well Asbuild |  |
|--------------------------------|------------------|--------------|--|
| EW-333 WELL NUMBER OR NAME     |                  |              |  |
| 67 LINEAR FEET OF DRILLING     |                  |              |  |
| 67 LINEAR FEET OF COMPLETION   |                  |              |  |
| 0 LINEAR FEET OF ABANDONMENT   |                  |              |  |
| Time in:                       | Time out:        |              |  |
| Time in: 9:40AM                | Time out: 1:15PM |              |  |
| Weather conditions:            | cloudy           |              |  |
| Site conditions:               | 22 degrees       |              |  |
| Rig hrs:                       | 5089             |              |  |
| Service:                       | Raidiator Grease |              |  |
| EW-333 MADE TOTAL DEPTH OF 67' |                  | TOP 0        |  |
| BUILT A BENCH FOR EW-333.      |                  | 1            |  |
|                                |                  | 3            |  |
|                                |                  | 15           |  |
|                                |                  | 17           |  |
|                                |                  | 18           |  |
|                                |                  | 20           |  |
|                                |                  |              |  |
|                                |                  | 66           |  |
|                                |                  | 67           |  |

| Monitoring Log            |        |     |          | Well Boring Log |             |                   |                    |      |
|---------------------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time                      | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM                    |        |     |          | 1-10            | hht/cover   | mod               | dry                | 60   |
| 7:00AM                    |        |     |          | 10-20           | hht/metal   | mod               | dry                | 81   |
| 8:00AM                    |        |     |          | 20-30           | hht/wood    | mod               | dry                | 80   |
| 9:00AM                    |        |     |          | 30-40           | hht/plastic | mod               | dry                | 72   |
| 10:00AM                   | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 63   |
| 11:00AM                   | 20.9   | 0   | 0        | 50-69           | hht/plastic | mod               | dry                | 60   |
| 12:00AM                   | 20.9   | 0   | 0        | 60-67'          | hht/wood    | mod               | dry                | 67   |
| 1:00PM                    | 20.9   | 0   | 0        | 70-80           |             |                   |                    |      |
| 2:00PM                    |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM                    |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM                    |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM                    |        |     |          | 110-120         |             |                   |                    |      |
| Notes                     |        |     |          |                 |             |                   |                    |      |
| BUILT A BENCH FOR EW-333. |        |     |          | TD-67'          |             |                   |                    |      |

CLIENT REPRESENTATIVE 1/16/14 DATE  
  
 NAME & TITLE Eric Steen

Eric Steen  
 AEGL SITE SUPERVISOR  
 1/16/2014  
 DATE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/17/2014

PROJECT# 10-113-130

| Drilling                         | Well Asbuilt |
|----------------------------------|--------------|
| EW-330 WELL NUMBER OR NAME       |              |
| 49 LINEAR FEET OF DRILLING       |              |
| 49 LINEAR FEET OF COMPLETION     |              |
| 0 LINEAR FEET OF ABANDONMENT     |              |
| Time in: Time out:               |              |
| Time in: 6:40AM Time out: 8:30AM |              |
| Weather conditions: cloudy       |              |
| Site conditions: 32 degrees      |              |
| Rig hrs: 5096                    |              |
| Service: Radiator Grease         |              |
| EW-330 MADE TOTAL DEPTH.         |              |
| We built a bench.                |              |

| Monitoring Log            |        |     |          | Well Boring Log |             |                   |                    |      |
|---------------------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time                      | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM                    | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 51   |
| 7:00AM                    | 20.9   | 0   | 0        | 10-20           | hht/wood    | mod               | dry                | 70   |
| 8:00AM                    | 20.9   | 0   | 0        | 20-30           | hht/wood    | mod               | dry                | 79   |
| 9:00AM                    | 20.9   | 0   | 0        | 30-40           | hht/plastic | mod               | dry                | 73   |
| 10:00AM                   |        |     |          | 40-49'          | hht/metal   | mod               | dry                | 80   |
| 11:00AM                   |        |     |          | 50-60           |             |                   |                    |      |
| 12:00AM                   |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM                    |        |     |          | 70-80           |             |                   |                    |      |
| 2:00PM                    |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM                    |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM                    |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM                    |        |     |          | 110-120         |             |                   |                    |      |
| Notes                     |        |     |          |                 |             |                   |                    |      |
| BUILT A BENCH FOR EW-330. |        |     |          |                 | TD-49'      |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Eric Steen

AEGL SITE SUPERVISOR

1/17/2014

DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/17/2014

PROJECT# 10-113-130

| Drilling                     |  |                  |  | Well Asbuild |  |  |  |
|------------------------------|--|------------------|--|--------------|--|--|--|
| EW-331 WELL NUMBER OR NAME   |  |                  |  |              |  |  |  |
| 73 LINEAR FEET OF DRILLING   |  |                  |  |              |  |  |  |
| 73 LINEAR FEET OF COMPLETION |  |                  |  |              |  |  |  |
| 0 LINEAR FEET OF ABANDONMENT |  |                  |  |              |  |  |  |
| Time in:                     |  | Time out:        |  |              |  |  |  |
| Time in: 9:20AM              |  | Time out: 1:20AM |  |              |  |  |  |
| Weather conditions: cloudy   |  |                  |  |              |  |  |  |
| Site conditions: 32 degrees  |  |                  |  |              |  |  |  |
| Rig hrs: 5099                |  |                  |  |              |  |  |  |
| Service: Radiator Grease     |  |                  |  |              |  |  |  |
| EW-331 MADE TOTAL DEPTH.     |  |                  |  |              |  |  |  |
| We built a bench.            |  |                  |  |              |  |  |  |
|                              |  |                  |  |              |  |  |  |
|                              |  |                  |  |              |  |  |  |

| Monitoring Log            |        |     |          | Well Boring Log |             |                   |                    |      |
|---------------------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time                      | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM                    |        |     |          | 1-10            | hht/cover   | mod               | dry                | 50   |
| 7:00AM                    |        |     |          | 10-20           | hht/plastic | mod               | dry                | 72   |
| 8:00AM                    |        |     |          | 20-30           | hht/tires   | mod               | dry                | 66   |
| 9:00AM                    | 20.9   | 0   | 0        | 30-40           | hht/metal   | mod               | dry                | 81   |
| 10:00AM                   | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 92   |
| 11:00AM                   | 20.9   | 0   | 0        | 50-60           | hht/wood    | mod               | dry                | 100  |
| 12:00AM                   | 20.9   | 0   | 0        | 60-70           | hht/wood    | mod               | dry                | 76   |
| 1:00PM                    | 20.9   | 0   | 0        | 70-73'          | hht/metal   | mod               | damp               | 88   |
| 2:00PM                    | 20.9   | 0   | 0        | 80-90           |             |                   |                    |      |
| 3:00PM                    |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM                    |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM                    |        |     |          | 110-120         |             |                   |                    |      |
| Notes                     |        |     |          |                 |             |                   |                    |      |
| BUILT A BENCH FOR EW-331. |        |     |          | TD-73'          |             |                   |                    |      |
|                           |        |     |          |                 |             |                   |                    |      |
|                           |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

Eric Steen

1/17/2014

AEGL SITE SUPERVISOR

DATE

NAME & TITLE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/20/2014

PROJECT# 10-113-130

| Drilling                                 | Well Asbuild |
|------------------------------------------|--------------|
| EW-50R3 WELL NUMBER OR NAME              |              |
| 71 LINEAR FEET OF DRILLING               |              |
| 71 LINEAR FEET OF COMPLETION             |              |
| 0 LINEAR FEET OF ABANDONMENT             |              |
| Time in: _____ Time out: _____           |              |
| Time in: 6:35AM Time out: 9:44AM         |              |
| Weather conditions: cloudy               |              |
| Site conditions: 18 degrees              |              |
| Rig hrs: 5106                            |              |
| Service: Radiator Grease                 |              |
| EW-50R3 was called at 71' due to sludge. |              |
| We built a bench.                        |              |
| EW-50R3 is a 8" well casing.             |              |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 70   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/plastic | mod               | dry                | 71   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/wood    | mod               | dry                | 78   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/wire    | mod               | dry                | 82   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 93   |
| 11:00AM        |        |     |          | 50-60           | hht/metal   | mod               | dry                | 88   |
| 12:00AM        |        |     |          | 60-70           | hht/sludge  | heavy             | wet                | 90   |
| 1:00PM         |        |     |          | 70-71'          | hht/sludge  | heavy             | wet                | 85   |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-71'      |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

Eric Steen

1/20/2014

AEGL SITE SUPERVISOR

DATE

NAME & TITLE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/20/2014

PROJECT# 10-113-130

| Drilling                                                                                                                                                                                                                         |  | Well Asbuild                      |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--|
| <b>EW-334</b> WELL NUMBER OR NAME                                                                                                                                                                                                |  |                                   |  |
| 53 LINEAR FEET OF DRILLING                                                                                                                                                                                                       |  |                                   |  |
| 53 LINEAR FEET OF COMPLETION                                                                                                                                                                                                     |  |                                   |  |
| 0 LINEAR FEET OF ABANDONMENT                                                                                                                                                                                                     |  |                                   |  |
| Time in: _____ Time out: _____<br>Time in: <u>10:35PM</u> Time out: <u>12:30PM</u><br>Weather conditions: <u>cloudy</u><br>Site conditions: <u>32 degrees</u><br>Rig hrs: <u>5109</u><br>Service: <u>Raidiator</u> <u>Grease</u> |  |                                   |  |
| EW-334 MADE TOTAL DEPTH.                                                                                                                                                                                                         |  | Length of Solid <u>20</u>         |  |
| We built a bench.                                                                                                                                                                                                                |  | Clean on site soil backfill       |  |
|                                                                                                                                                                                                                                  |  | Bentonite 2 Ft Hydrated           |  |
|                                                                                                                                                                                                                                  |  | Soil 1 ft                         |  |
|                                                                                                                                                                                                                                  |  | Isolation Ring above              |  |
|                                                                                                                                                                                                                                  |  | Length of Gravel Pack <u>0</u>    |  |
|                                                                                                                                                                                                                                  |  | Length of Perf. Pipe <u>32</u>    |  |
|                                                                                                                                                                                                                                  |  | style of pipe                     |  |
|                                                                                                                                                                                                                                  |  | Bore diameter <u>36"well bore</u> |  |
|                                                                                                                                                                                                                                  |  | Bottom of bore                    |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |     |          | 1-10            | hht/cover   | mod               | dry                | 82   |
| 7:00AM         |        |     |          | 10-20           | hht/wood    | mod               | dry                | 74   |
| 8:00AM         |        |     |          | 20-30           | hht/plastic | mod               | dry                | 80   |
| 9:00AM         |        |     |          | 30-40           | hht/plastic | mod               | dry                | 73   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 80   |
| 11:00AM        | 20.9   | 0   | 0        | 50-53'          | hht/wood    | mod               | dry                | 68   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           |             |                   |                    |      |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           |             |                   |                    |      |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-53'      |                   |                    |      |

CLIENT REPRESENTATIVE 1/20/14 DATE  
  
 NAME & TITLE Eric Steen

Eric Steen  
 AEGL SITE SUPERVISOR

1/20/2014  
 DATE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL  
PROJECT# 10-113-130

DATE: 1/21/2014

| Drilling                          | Well Asbuild |
|-----------------------------------|--------------|
| EW-173 WELL NUMBER OR NAME        |              |
| 72' LINEAR FEET OF DRILLING       |              |
| 72' LINEAR FEET OF COMPLETION     |              |
| 0 LINEAR FEET OF ABANDONMENT      |              |
| Time in: _____ Time out: _____    |              |
| Time in: 7:00AM Time out: 10:15AM |              |
| Weather conditions: cloudy        |              |
| Site conditions: 18 degrees       |              |
| Rig hrs: 5106                     |              |
| Service: Raladiator Grease        |              |
| EW-173 MADE TOTAL DEPTH.          |              |
| We built a bench.                 |              |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 51   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/metal   | mod               | dry                | 74   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/plastic | mod               | dry                | 80   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/wood    | mod               | dry                | 73   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/wood    | mod               | dry                | 87   |
| 11:00AM        |        |     |          | 50-60           | hht/wood    | mod               | dry                | 91   |
| 12:00AM        |        |     |          | 60-70           | hht/plastic | mod               | dry                | 82   |
| 1:00PM         |        |     |          | 70-72'          | hht/plastic | mod               | dry                | 76   |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-72'      |                   |                    |      |

Eric Steen 1/21/14  
CLIENT REPRESENTATIVE DATE  
Tina A. Todia CQA  
NAME & TITLE

Eric Steen 1/21/2014  
AEGL SITE SUPERVISOR DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/21/2014

PROJECT# 10-113-130

| Drilling                                                           |  | Well Asbuilt                                                                                                                                                                                                                                                            |  |
|--------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| EW-172 WELL NUMBER OR NAME                                         |  |                                                                                                                                                                                                                                                                         |  |
| 54' LINEAR FEET OF DRILLING                                        |  |                                                                                                                                                                                                                                                                         |  |
| 54' LINEAR FEET OF COMPLETION                                      |  |                                                                                                                                                                                                                                                                         |  |
| 0 LINEAR FEET OF ABANDONMENT                                       |  |                                                                                                                                                                                                                                                                         |  |
| Time in: _____ Time out: _____                                     |  |                                                                                                                                                                                                                                                                         |  |
| Time in: <u>12:20PM</u> Time out: <u>2:00PM</u>                    |  |                                                                                                                                                                                                                                                                         |  |
| Weather conditions: <u>cloudy</u>                                  |  |                                                                                                                                                                                                                                                                         |  |
| Site conditions: <u>10 degrees</u>                                 |  |                                                                                                                                                                                                                                                                         |  |
| Rig hrs: <u>5120</u>                                               |  |                                                                                                                                                                                                                                                                         |  |
| Service: <u>Raidiator Grease</u>                                   |  |                                                                                                                                                                                                                                                                         |  |
| EW-172 was called @ 54' due to a OBSTRUCTION.<br>We built a bench. |  | Length of Solid <u>20</u><br>Clean on site soil backfill<br>Bentonite 2 Ft Hydrated<br>Soil 1 ft<br>Isolation Ring<br>above<br>Length of Gravel Pack <u>0</u><br>Length of Perf .Pipe <u>33</u><br>style of pipe<br>Bore diameter <u>36"well bore</u><br>Bottom of bore |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |     |          | 1-10            | hht/cover   | mod               | dry                | 53   |
| 7:00AM         |        |     |          | 10-20           | hht/plastic | mod               | dry                | 73   |
| 8:00AM         |        |     |          | 20-30           | hht/plastic | mod               | dry                | 65   |
| 9:00AM         |        |     |          | 30-40           | hht/wood    | mod               | dry                | 64   |
| 10:00AM        |        |     |          | 40-50           | hht/wood    | mod               | dry                | 88   |
| 11:00AM        | 20.9   | 0   | 0        | 50-54'          | hht/metal   | mod               | damp               | 81   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           |             |                   |                    |      |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           |             |                   |                    |      |
| 2:00PM         | 20.9   | 0   | 0        | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-54'      |                   |                    |      |

CLIENT REPRESENTATIVE Eric Steen DATE 1/21/14  
  
 NAME & TITLE Eric Steen CQA

Eric Steen  
 AEGL SITE SUPERVISOR  
 DATE 1/21/2014



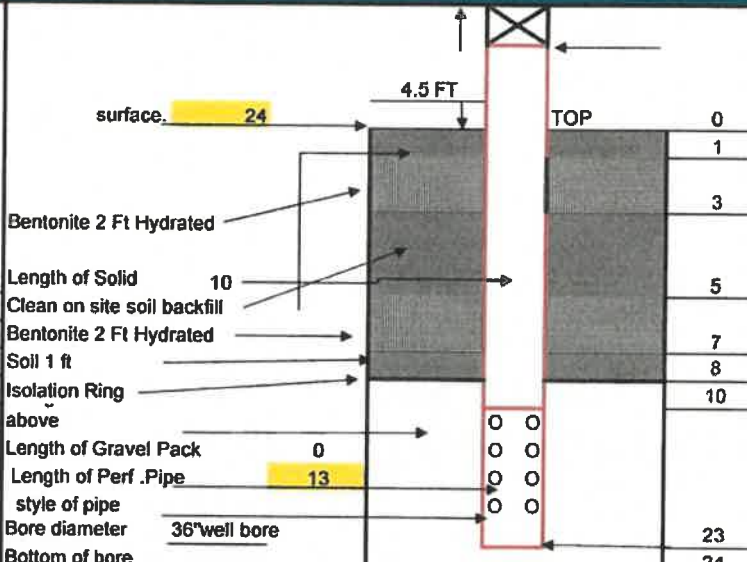


American  
Environmental  
Group Ltd.

## Well Log

PROJECT NAME LORAIN CO. LANDFILL  
PROJECT# 10-113-130

DATE: 1/22/2014

| Drilling                                   |  | Well Asbuilt                                                                        |  |
|--------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| EW-327 WELL NUMBER OR NAME                 |  |  |  |
| 24 LINEAR FEET OF DRILLING                 |  |                                                                                     |  |
| 24 LINEAR FEET OF COMPLETION               |  |                                                                                     |  |
| 0 LINEAR FEET OF ABANDONMENT               |  |                                                                                     |  |
| Time in: Time out:                         |  |                                                                                     |  |
| Time in: 6:30AM Time out: 8:30AM           |  |                                                                                     |  |
| Weather conditions: cloudy                 |  |                                                                                     |  |
| Site conditions: 2 degrees                 |  |                                                                                     |  |
| Rig hrs: 5129                              |  |                                                                                     |  |
| Service: Radiator Grease                   |  |                                                                                     |  |
| EW-327 was called due to sludge and water. |  |                                                                                     |  |
| We built a bench.                          |  |                                                                                     |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 51   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/plastic | mod               | damp               | 63   |
| 8:00AM         | 20.9   | 0   | 0        | 20-24'          | hht/sludge  | mod               | wet                | 64   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           |             |                   |                    |      |
| 10:00AM        |        |     |          | 40-50           |             |                   |                    |      |
| 11:00AM        |        |     |          | 50-60           |             |                   |                    |      |
| 12:00AM        |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM         |        |     |          | 70-80           |             |                   |                    |      |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-24'      |                   |                    |      |

CLIENT REPRESENTATIVE

DATE

NAME & TITLE

Eric Steen

AEGL SITE SUPERVISOR

1/22/2014

DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/22/2014

PROJECT# 10-113-130

| Drilling                                                             |                            | Well Asbuild |  |
|----------------------------------------------------------------------|----------------------------|--------------|--|
| <b>EW-151R WELL NUMBER OR NAME</b>                                   |                            |              |  |
| 100'                                                                 | LINEAR FEET OF DRILLING    |              |  |
| 100'                                                                 | LINEAR FEET OF COMPLETION  |              |  |
| 0                                                                    | LINEAR FEET OF ABANDONMENT |              |  |
| Time in:                                                             | Time out:                  |              |  |
| Time in: 9:35AM                                                      | Time out: 2:10PM           |              |  |
| Weather conditions:                                                  | cloudy                     |              |  |
| Site conditions:                                                     | 10 degrees                 |              |  |
| Rig hrs:                                                             | 5120                       |              |  |
| Service:                                                             | Raidiator Grease           |              |  |
| EW-151R was called due to a obstruction @ 100'.<br>We built a bench. |                            |              |  |

| Monitoring Log |        |     |          | Well Boring Log |              |                   |                    |      |
|----------------|--------|-----|----------|-----------------|--------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition  | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         |        |     |          | 1-10            | hht/cover    | mod               | dry                | 62   |
| 7:00AM         |        |     |          | 10-20           | hht/dirt     | mod               | dry                | 90   |
| 8:00AM         |        |     |          | 20-30           | hht/plastic  | mod               | dry                | 88   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht5/plastic | mod               | dry                | 82   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/wood     | mod               | dry                | 88   |
| 11:00AM        | 20.9   | 0   | 0        | 50-60           | hht/plastic  | mod               | dry                | 81   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           | hht/plastic  | mod               | dry                | 84   |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           | hht/wood     | mod               | dry                | 95   |
| 2:00PM         | 20.9   | 0   | 0        | 80-90           | hht/plastic  | mod               | dry                | 102  |
| 3:00PM         |        |     |          | 90-100          | hht/metal    | mod               | dry                | 98   |
| 4:00PM         |        |     |          | 100-110         |              |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |              |                   |                    |      |
| Notes          |        |     |          |                 |              |                   |                    |      |
|                |        |     |          |                 | TD-100'      |                   |                    |      |
|                |        |     |          |                 |              |                   |                    |      |

CLIENT REPRESENTATIVE 1/22/14 DATE  
  
 NAME & TITLE

Eric Steen  
 AEGL SITE SUPERVISOR 1/22/2014 DATE





## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/23/2014

PROJECT# 10-113-130

| Drilling                                |  | Well Asbuilt                |  |
|-----------------------------------------|--|-----------------------------|--|
| EW-51R3 WELL NUMBER OR NAME             |  |                             |  |
| 96' LINEAR FEET OF DRILLING             |  |                             |  |
| 96' LINEAR FEET OF COMPLETION           |  |                             |  |
| 0 LINEAR FEET OF ABANDONMENT            |  |                             |  |
| Time In: Time out:                      |  |                             |  |
| Time in: 6:40AM Time out: 1:05PM        |  |                             |  |
| Weather conditions: cloudy              |  |                             |  |
| Site conditions: 10 degrees             |  |                             |  |
| Rig hrs: 5140                           |  |                             |  |
| Service: Raidiator Grease               |  |                             |  |
| EW-51R3 was called due to sludge @ 96'. |  | Bentonite 2 Ft Hydrated     |  |
| We built a bench.                       |  | Length of Solid 20          |  |
| EW-51R3 is a 8" well.                   |  | Clean on site soil backfill |  |
|                                         |  | Bentonite 2 Ft Hydrated     |  |
|                                         |  | Soil 1 ft                   |  |
|                                         |  | Isolation Ring              |  |
|                                         |  | above                       |  |
|                                         |  | Length of Gravel Pack 0     |  |
|                                         |  | Length of Perf. Pipe 75     |  |
|                                         |  | style of pipe               |  |
|                                         |  | Bore diameter 36"well bore  |  |
|                                         |  | Bottom of bore              |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 59   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/wood    | mod               | dry                | 92   |
| 8:00AM         | 20.9   | 0   | 0        | 20-30           | hht/metal   | mod               | dry                | 80   |
| 9:00AM         | 20.9   | 0   | 0        | 30-40           | hht/plastic | mod               | dry                | 63   |
| 10:00AM        | 20.9   | 0   | 0        | 40-50           | hht/plastic | mod               | dry                | 85   |
| 11:00AM        | 20.9   | 0   | 0        | 50-60           | hht/wood    | mod               | dry                | 74   |
| 12:00AM        | 20.9   | 0   | 0        | 60-70           | hht/plastic | mod               | dry                | 91   |
| 1:00PM         | 20.9   | 0   | 0        | 70-80           | hht/wood    | mod               | dry                | 114  |
| 2:00PM         | 20.9   | 0   | 0        | 80-90           | hht/wood    | mod               | damp               | 100  |
| 3:00PM         |        |     |          | 90-96'          | hht/sludge  | heavy             | wet                | 81   |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-96'      |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE 1/23/14  
 DATE  
 NAME & TITLE

Eric Steen 1/23/2014  
 AEGL SITE SUPERVISOR DATE



## Well Log

PROJECT NAME LORAIN CO. LANDFILL

DATE: 1/27/2014

PROJECT# 10-113-130

| Drilling                                               |  | Well Asbuild |  |
|--------------------------------------------------------|--|--------------|--|
| RSW-1 WELL NUMBER OR NAME                              |  |              |  |
| Rock Sump                                              |  |              |  |
| 25' LINEAR FEET OF DRILLING                            |  |              |  |
| 25' LINEAR FEET OF COMPLETION                          |  |              |  |
| 0 LINEAR FEET OF ABANDONMENT                           |  |              |  |
| Time in: _____ Time out: _____                         |  |              |  |
| Time in: 7:20AM Time out: 8:00AM                       |  |              |  |
| Weather conditions: cloudy                             |  |              |  |
| Site conditions: 2 degrees                             |  |              |  |
| Rig hrs: 5152                                          |  |              |  |
| Service: Raidiator Grease                              |  |              |  |
| ROCK SUMP was called @ a 25' bore depth due to sludge. |  |              |  |
| We built a bench.                                      |  |              |  |

| Monitoring Log |        |     |          | Well Boring Log |             |                   |                    |      |
|----------------|--------|-----|----------|-----------------|-------------|-------------------|--------------------|------|
| Time           | OXYGEN | H2S | LEL / CO | Depth           | Composition | Degree of Decomp. | Degree of Moisture | Temp |
| 6:00AM         | 20.9   | 0   | 0        | 1-10            | hht/cover   | mod               | dry                | 58   |
| 7:00AM         | 20.9   | 0   | 0        | 10-20           | hht/plastic | mod               | damp               | 61   |
| 8:00AM         | 20.9   | 0   | 0        | 20-25'          | hht/plastic | very              | wet                | 53   |
| 9:00AM         |        |     |          | 30-40           |             |                   |                    |      |
| 10:00AM        |        |     |          | 40-50           |             |                   |                    |      |
| 11:00AM        |        |     |          | 50-60           |             |                   |                    |      |
| 12:00AM        |        |     |          | 60-70           |             |                   |                    |      |
| 1:00PM         |        |     |          | 70-80           |             |                   |                    |      |
| 2:00PM         |        |     |          | 80-90           |             |                   |                    |      |
| 3:00PM         |        |     |          | 90-100          |             |                   |                    |      |
| 4:00PM         |        |     |          | 100-110         |             |                   |                    |      |
| 5:00PM         |        |     |          | 110-120         |             |                   |                    |      |
| Notes          |        |     |          |                 |             |                   |                    |      |
|                |        |     |          |                 | TD-25'      |                   |                    |      |
|                |        |     |          |                 |             |                   |                    |      |

CLIENT REPRESENTATIVE Janet A. Todia DATE 1/27/14  
 NAME & TITLE CRA

Eric Steen 1/27/2014  
 AEGL SITE SUPERVISOR DATE

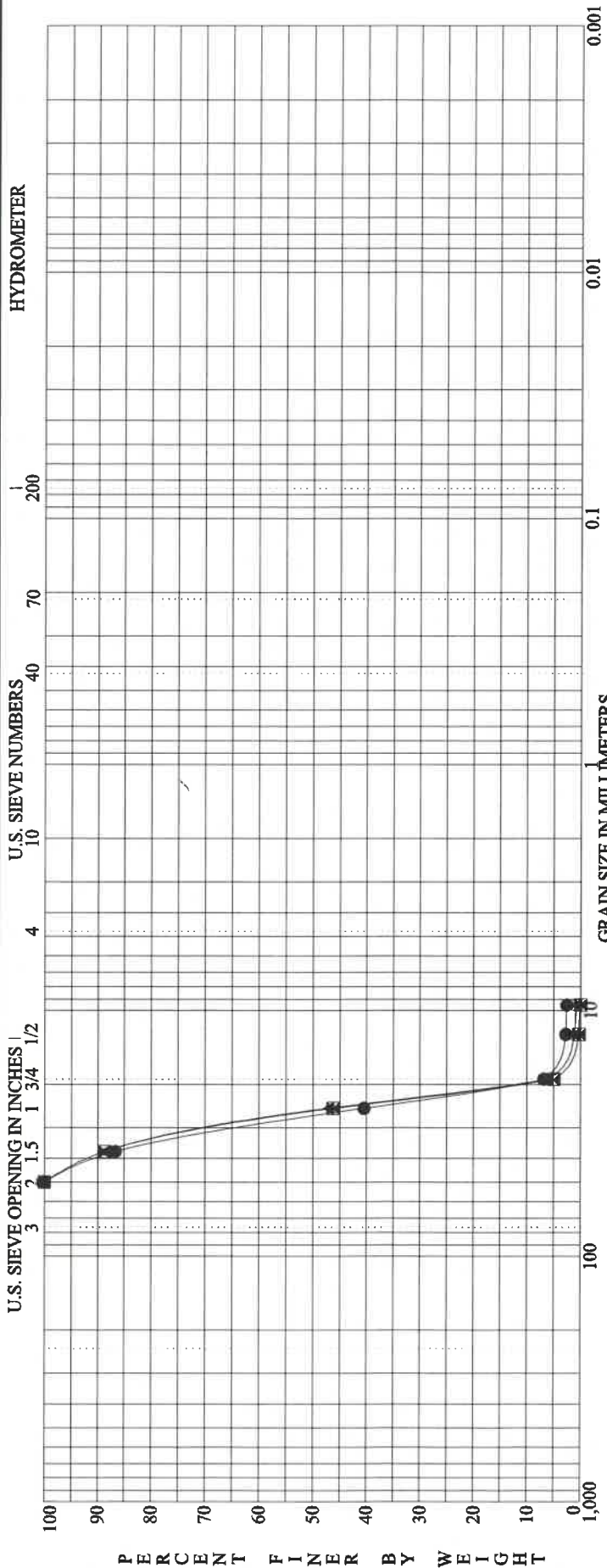




## APPENDIX F – No. 4 Stone Laboratory Results







| ORIGIN SIZE IN MILLIMETERS      |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
|---------------------------------|-------|-------------|--|-----------------------------------|---------|---------|---------|---------|---------|--------------|-------|-------|--|--|
| BOULDERS                        |       | COBBLES     |  | GRAVEL                            |         |         | SAND    |         |         | SILT OR CLAY |       |       |  |  |
|                                 |       |             |  | coarse                            | fine    |         | coarse  | medium  | fine    |              |       |       |  |  |
| Classification                  |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
| Specimen Identification - Depth |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
| ●                               | BAG-1 | As Received |  | #4 STONE                          |         |         |         |         |         |              |       |       |  |  |
| ☒                               | BAG-1 | Before pH4  |  |                                   |         |         |         |         |         |              |       |       |  |  |
| ▲                               | BAG-1 | After pH 4  |  | %CARBONATE RESIDUE CONTENT = 0.43 |         |         |         |         |         |              |       |       |  |  |
|                                 |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
|                                 |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
| Specimen Identification - Depth |       |             |  | D100                              | D95     | D60     | D50     | D10     | %Gravel | %Sand        | %Silt | %Clay |  |  |
| ●                               | BAG-1 | As Received |  | 50.0000                           | 44.8941 | 29.6836 | 27.1906 | 19.5012 |         |              |       |       |  |  |
| ☒                               | BAG-1 | Before pH4  |  | 50.0000                           | 44.0619 | 28.5222 | 25.9216 | 19.6472 |         |              |       |       |  |  |
| ▲                               | BAG-1 | After pH 4  |  | 50.0000                           | 44.0372 | 28.3585 | 25.7254 | 19.4948 |         |              |       |       |  |  |
|                                 |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |
|                                 |       |             |  |                                   |         |         |         |         |         |              |       |       |  |  |

ASTM D422

GRADATION CURVE

PROJECT  
LOCATION  
JOB NO.

LORAIN COUNTY II - 2013 GCCS CQA  
OBERLIN, OHIO  
1173-12-003A, B & C #143908

DATE 1/30/13







## APPENDIX G – Geosynthetics Test Results







## Geomembrane Trial Weld Summary

Project Name: Lorain II Landfill: 2013 GCCS Phase 4 and 2014 CGGS Phase 1

CQA Monitor: Janet Todia

Project Number: REPU00151

| Test No. | Date    | Time | Weather (Cloudy/Sunny) | Amb. Temp. (° F) | Welder I.D. | Machine Number | Temp. Setting/Speed | Weld Type | PEEL (ppi)   |     |     |             |     |     | SHEAR (ppi) |     |     | Test Result (P/F) | Comments |
|----------|---------|------|------------------------|------------------|-------------|----------------|---------------------|-----------|--------------|-----|-----|-------------|-----|-----|-------------|-----|-----|-------------------|----------|
|          |         |      |                        |                  |             |                |                     |           | Outside Weld |     |     | Inside Weld |     |     | 1           | 2   | 3   |                   |          |
|          |         |      |                        |                  |             |                |                     |           | 1            | 2   | 3   | 1           | 2   | 3   |             |     |     |                   |          |
|          |         |      |                        |                  |             |                |                     |           |              |     |     |             |     |     |             |     |     |                   |          |
| 1        | 2/19/14 | 0700 | Cloudy                 | 30               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 82          | 90  | 88  | 102         | 101 | 101 | P                 | N/A      |
| 2        | 2/19/14 | 1100 | Cloudy                 | 34               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 85          | 93  | 92  | 101         | 103 | 101 | P                 | N/A      |
| 3        | 2/19/14 | 1300 | Sunny                  | 40               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 83          | 92  | 90  | 100         | 102 | 101 | P                 | N/A      |
| 4        | 2/9/14  | 1700 | Sunny                  | 41               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 85          | 91  | 90  | 102         | 103 | 101 | P                 | N/A      |
| 5        | 2/20/14 | 0730 | Overcast               | 22               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 89          | 94  | 93  | 107         | 110 | 110 | P                 | N/A      |
| 6        | 2/24/14 | 1228 | Overcast               | 23               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 71          | 68  | 80  | 104         | 99  | 101 | P                 | N/A      |
| 7        | 2/26/14 | 0718 | Overcast               | 3                | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 107         | 74  | 103 | 125         | 129 | 109 | P                 | N/A      |
| 8        | 3/3/14  | 0800 | Sunny                  | 9                | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 85          | 99  | 68  | 144         | 145 | 132 | P                 | N/A      |
| 9        | 3/3/14  | 1200 | Sunny                  | 8                | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 89          | 100 | 98  | 130         | 142 | 128 | P                 | N/A      |
| 10       | 3/3/14  | 1530 | Sunny                  | 8                | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 90          | 98  | 95  | 101         | 128 | 130 | P                 | N/A      |
| 11       | 3/4/14  | 0730 | Overcast               | 6                | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 77          | 96  | 93  | 119         | 123 | 126 | P                 | N/A      |
| 12       | 4/2/14  | 0900 | Sunny                  | 52               | Delgado     | G53            | 350°F - 450°F       | E         | N/A          | N/A | N/A | 82          | 70  | 81  | 82          | 94  | 80  | P                 | N/A      |







## Geomembrane Repair Summary

Project Name: Lorain II Landfill: 2013 GCCS Phase 4 and 2014 Phase 1

CQA Monitor: Janet Todia

Project Number: REPU00151

| Repair Number | Date    | Time | Seam/ Panel | Operator/<br>Machine | Repair Location |      | Description                                | Size of Repair | Vacuum Test Date | Vacuum Test Results (P/F) |
|---------------|---------|------|-------------|----------------------|-----------------|------|--------------------------------------------|----------------|------------------|---------------------------|
|               |         |      |             |                      | North           | East |                                            |                |                  |                           |
| 1             | 2/19/14 | 0808 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW227                            | 3' x 3'        | 2/19/14          | P                         |
| 2             | 2/19/14 | 1230 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW101R2                          | 3' x 3'        | 2/19/14          | P                         |
| 3             | 2/19/14 | 1400 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW225                            | 3' x 3'        | 2/19/14          | P                         |
| 4             | 2/19/14 | 1500 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW226                            | 3' x 3'        | 2/19/14          | P                         |
| 5             | 2/19/14 | 1620 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW140R                           | 3' x 3'        | 2/19/14          | P                         |
| 6             | 2/19/14 | 1700 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW228                            | 3' x 3'        | 2/19/14          | P                         |
| 7             | 2/20/14 | 0830 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW224                            | 3' x 3'        | 2/20/14          | P                         |
| 8             | 2/24/14 | 1300 | N/A         | Delgado/G53          | N/A             | N/A  | 20 x 20 patch on 24" replacement line      | 20' x 20'      | 2/24/14          | P                         |
| 9             | 2/26/14 | 0800 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW87R2                           | 3' x 3'        | 2/26/14          | P                         |
| 10            | 3/3/14  | 1000 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW90R                            | 3' x 3'        | 3/3/14           | P                         |
| 11            | 3/3/14  | 1215 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW94R                            | 3' x 3'        | 3/3/14           | P                         |
| 12            | 3/3/14  | 1330 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW79R                            | 3' x 3'        | 3/3/14           | P                         |
| 13            | 3/3/14  | 1430 | N/A         | Delgado/G53          | N/A             | N/A  | Bore seal EW164R                           | 3' x 3'        | 3/3/14           | P                         |
| 14            | 4/2/14  | 0930 | N/A         | Rico/G53             | N/A             | N/A  | South end of 24" header replacement repair | 30' x 30'      | 3/3/14           | P                         |







## APPENDIX H – Air Monitoring Results









## Air Monitoring Form

[illegible]





## Air Monitoring Form

| Name of Project/Site: <b>Lojan II Phase 4</b>                                                                                    |                                                                                  |                            |             |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------|-------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                        |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Sam Tada</b>                                                                              |                                                                                  |                            |             |                        |               | Date: <b>12/17/13</b>       |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                  | Model: <b>24 gas meter</b> |             | Manufacturer:          |               | Model:                      |                   |                        |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                  |                            |             |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                            | Ambient Temp (F)           | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                                  |                            |             |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                                  |                            | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <b>continue 12" from BW 329* northwest corner to tie 12 point on north slope</b> | <b>20°F</b>                | <b>—</b>    | <b>—</b>               | <b>—</b>      | <b>20.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |
| 7:45                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                                  |                            |             |                        |               |                             |                   |                        |          |



# Air Monitoring Form

|                                     |                    |             |          |
|-------------------------------------|--------------------|-------------|----------|
| Name of Project/Site:               | Lot 2.1 II Phase 4 | Project No: | 150,0001 |
| Project/Site Location:              | Oberlin, OH        |             |          |
| Employee Performing Air Monitoring: | Janet Todia        | Date:       | 12/19/13 |

## Instrument(s)

|               |     |        |             |               |  |        |  |
|---------------|-----|--------|-------------|---------------|--|--------|--|
| Manufacturer: | QRA | Model: | H gas meter | Manufacturer: |  | Model: |  |
|---------------|-----|--------|-------------|---------------|--|--------|--|

|                                                              |                                                                     |          |  |
|--------------------------------------------------------------|---------------------------------------------------------------------|----------|--|
| Were instruments calibrated per manufacturer's instructions? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Remarks: |  |
|--------------------------------------------------------------|---------------------------------------------------------------------|----------|--|

## Air Monitoring Data

| Time          | Location and Activity | Ambient Temp (F) | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection |                   |                        |          |
|---------------|-----------------------|------------------|-------------|------------------------|---------------|---------------------|-------------------|------------------------|----------|
|               |                       |                  |             |                        |               | O <sub>2</sub> (%)  | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level: |                       |                  | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0    | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30          | 12" tie in; drill     | 31°F             |             |                        |               | 20.9                | 0                 | 0                      | 0        |
| 7:45          | BW 4523; drill        |                  |             |                        |               |                     |                   |                        |          |
| 8:00          | BW 328                |                  |             |                        |               |                     |                   |                        |          |
| 8:15          |                       |                  |             |                        |               |                     |                   |                        |          |
| 8:30          |                       |                  |             |                        |               |                     |                   |                        |          |
| 8:45          |                       |                  |             |                        |               |                     |                   |                        |          |
| 9:00          |                       |                  |             |                        |               |                     |                   |                        |          |
| 9:15          |                       |                  |             |                        |               |                     |                   |                        |          |
| 9:30          |                       |                  |             |                        |               |                     |                   |                        |          |
| 9:45          |                       |                  |             |                        |               |                     |                   |                        |          |
| 10:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 10:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 10:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 10:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 11:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 11:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 11:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 11:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 12:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 12:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 12:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 12:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 13:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 13:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 13:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 13:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 14:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 14:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 14:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 14:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 15:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 15:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 15:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 15:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 16:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 16:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 16:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 16:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 17:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 17:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 17:30         |                       |                  |             |                        |               |                     |                   |                        |          |
| 17:45         |                       |                  |             |                        |               |                     |                   |                        |          |
| 18:00         |                       |                  |             |                        |               |                     |                   |                        |          |
| 18:15         |                       |                  |             |                        |               |                     |                   |                        |          |
| 18:30         |                       |                  |             |                        |               |                     |                   |                        |          |

19:00



## Air Monitoring Form

|                                                        |                             |
|--------------------------------------------------------|-----------------------------|
| Name of Project/Site: <i>Kellogg II Phase 4</i>        | Project No: <i>150,0001</i> |
| Project/Site Location: <i>Ogellip, OH</i>              |                             |
| Employee Performing Air Monitoring: <i>Samir Todia</i> | Date: <i>12/31/13</i>       |

| Instrument(s)      |                    |               |        |
|--------------------|--------------------|---------------|--------|
| Manufacturer: QRAE | Model: H 925 meter | Manufacturer: | Model: |

Were instruments calibrated per manufacturer's instructions? ☒ Yes ☐ No Remarks:

### Air Monitoring Data

| Time          | Location and Activity                                     | Ambient Temp (F) | P/FID (ppm) | Benzene (If P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection |                   |                        |          |
|---------------|-----------------------------------------------------------|------------------|-------------|------------------------|---------------|---------------------|-------------------|------------------------|----------|
|               |                                                           |                  |             |                        |               | O <sub>2</sub> (%)  | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level: |                                                           |                  | ≥10         | Tube ≥ 1               | ≥25           | ≤ 19.5<br>≥ 22.0    | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30          | begin repair of 2" air line - had flange on former repair | 11°F             | /           | /                      | /             | 20.9                | 0                 | 0                      | 0        |
| 7:45          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 8:00          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 8:15          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 8:30          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 8:45          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 9:00          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 9:15          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 9:30          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 9:45          |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 10:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 10:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 10:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 10:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 11:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 11:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 11:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 11:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 12:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 12:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 12:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 12:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 13:00         | air leak repaired & recovered beam in place               |                  |             |                        |               |                     |                   |                        |          |
| 13:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 13:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 13:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 14:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 14:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 14:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 14:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 15:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 15:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 15:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 15:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 16:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 16:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 16:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 16:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 17:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 17:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 17:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 17:45         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 18:00         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 18:15         |                                                           |                  |             |                        |               |                     |                   |                        |          |
| 18:30         |                                                           |                  |             |                        |               |                     |                   |                        |          |



## Air Monitoring Form

| Name of Project/Site: <u>Lolain II Phase 4</u>                                                                                   |                                                                      |                  |                           |                        |               | Project No: <u>150c 8001</u> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|------------------------------|-------------------|------------------------|----------|
| Project/Site Location: <u>Obertin, OH</u>                                                                                        |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| Employee Performing Air Monitoring: <u>Janet Todia</u>                                                                           |                                                                      |                  |                           |                        |               | Date: <u>1/15/14</u>         |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| Manufacturer: <u>QRAE</u>                                                                                                        |                                                                      |                  | Model: <u>4 gas meter</u> |                        | Manufacturer: |                              |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                      |                  |                           |                        |               | Remarks:                     |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection          |                   |                        |          |
|                                                                                                                                  |                                                                      |                  |                           |                        |               | O <sub>2</sub> (%)           | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                      |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0             | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <u>Drill RW303R</u>                                                  | <u>19°F</u>      | <u>/</u>                  | <u>/</u>               | <u>/</u>      | <u>19.5</u>                  | <u>0</u>          | <u>0</u>               | <u>0</u> |
| 7:45                                                                                                                             | <u>excavate remote lateral connection &amp; road xing RW46R2</u>     |                  |                           |                        |               |                              |                   |                        |          |
| 8:00                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 8:15                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 8:30                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 8:45                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 9:00                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 9:15                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 9:30                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 9:45                                                                                                                             |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 10:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 10:15                                                                                                                            | <u>begin excavate road xing for remote lateral connection RW45R3</u> |                  |                           |                        |               |                              |                   |                        |          |
| 10:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 10:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 11:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 11:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 11:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 11:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 12:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 12:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 12:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 12:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 13:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 13:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 13:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 13:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 14:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 14:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 14:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 14:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 15:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 15:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 15:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 15:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 16:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 16:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 16:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 16:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 17:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 17:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 17:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 17:45                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 18:00                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 18:15                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |
| 18:30                                                                                                                            |                                                                      |                  |                           |                        |               |                              |                   |                        |          |



## Air Monitoring Form

## Air Monitoring Form

| Name of Project/Site: <u>Kosair II Phase 4</u>                                                                                   |                       |                           |                |                           |                  | Project No: <u>150.0001</u> |                      |                           |             |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|----------------|---------------------------|------------------|-----------------------------|----------------------|---------------------------|-------------|
| Project/Site Location: <u>Oberlin, OH</u>                                                                                        |                       |                           |                |                           |                  |                             |                      |                           |             |
| Employee Performing Air Monitoring: <u>Tamara Todd</u>                                                                           |                       |                           |                |                           |                  | Date: <u>1/17/14</u>        |                      |                           |             |
| Instrument(s)                                                                                                                    |                       |                           |                |                           |                  |                             |                      |                           |             |
| Manufacturer: <u>QRAE</u>                                                                                                        |                       | Model: <u>H gas meter</u> |                | Manufacturer:             |                  | Model:                      |                      |                           |             |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                       |                           |                |                           |                  | Remarks:                    |                      |                           |             |
| Air Monitoring Data                                                                                                              |                       |                           |                |                           |                  |                             |                      |                           |             |
| Time                                                                                                                             | Location and Activity | Ambient Temp<br>(F)       | P/FID<br>(ppm) | Benzene<br>(if P/FID ≥ 1) | Ammonia<br>(ppm) | Multi-Gas Detection         |                      |                           |             |
|                                                                                                                                  |                       |                           |                |                           |                  | O <sub>2</sub><br>(%)       | LEL (Methane)<br>(%) | H <sub>2</sub> S<br>(ppm) | CO<br>(ppm) |
| Action Level:                                                                                                                    |                       |                           | ≥ 10           | Tube ≥ 1                  | ≥ 25             | ≤ 19.5<br>≥ 22.0            | ≥ 10                 | ≥ 10                      | ≥ 25        |
| 7:30                                                                                                                             | Drill RW330           | 24°F                      | /              | /                         | /                | 20.9                        | 0                    | 0                         | 0           |
| 7:45                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 8:00                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 8:15                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 8:30                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 8:45                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 9:00                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 9:15                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 9:30                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 9:45                                                                                                                             |                       |                           |                |                           |                  |                             |                      |                           |             |
| 10:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 10:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 10:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 10:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 11:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 11:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 11:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 11:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 12:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 12:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 12:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 12:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 13:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 13:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 13:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 13:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 14:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 14:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 14:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 14:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 15:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 15:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 15:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 15:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 16:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 16:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 16:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 16:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 17:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 17:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 17:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 17:45                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 18:00                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 18:15                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |
| 18:30                                                                                                                            |                       |                           |                |                           |                  |                             |                      |                           |             |

*Note: Vertical arrows indicate continuous monitoring between recorded times.*

## Air Monitoring Form





## Air Monitoring Form

| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                                                                                                   |                  |                           |                        |               |                     | Project No: <b>150.0001</b> |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|---------------------|-----------------------------|------------------------|----------|
| Project/Site Location: <b>Obadiah, OH</b>                                                                                        |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| Employee Performing Air Monitoring: <b>Faret Todiz</b>                                                                           |                                                                                                   |                  |                           |                        |               |                     | Date: <b>1/23/14</b>        |                        |          |
| Instrument(s)                                                                                                                    |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| Manufacturer: <b>QR2E</b>                                                                                                        |                                                                                                   |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                     |                             | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                   |                  |                           |                        |               |                     | Remarks:                    |                        |          |
| Air Monitoring Data                                                                                                              |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| Time                                                                                                                             | Location and Activity                                                                             | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection |                             |                        |          |
|                                                                                                                                  |                                                                                                   |                  |                           |                        |               | O <sub>2</sub> (%)  | LEL (Methane) (%)           | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                                                   |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0    | ≥ 10                        | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | drill RW51R3                                                                                      | 9°F              |                           |                        |               | 20.9                | 0                           | 0                      | 0        |
| 7:45                                                                                                                             | <div style="text-align: center;">↓</div> excavate tie in<br>12" x 6" lateral for<br>RW172 & RW173 |                  |                           |                        |               |                     |                             |                        |          |
| 8:00                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 8:15                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 8:30                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 8:45                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 9:00                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 9:15                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 9:30                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 9:45                                                                                                                             |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 10:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 10:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 10:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 10:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 11:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 11:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 11:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 11:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 12:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 12:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 12:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 12:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 13:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 13:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 13:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 13:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 14:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 14:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 14:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 14:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 15:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 15:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 15:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 15:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 16:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 16:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 16:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 16:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 17:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 17:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 17:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 17:45                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 18:00                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 18:15                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |
| 18:30                                                                                                                            |                                                                                                   |                  |                           |                        |               |                     |                             |                        |          |









| Name of Project/Site: <u>Lorain II Phase 4</u>                                                                                   |                                                                 |                  |                           |                        |               | Project No: <u>158,0001</u> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <u>Oberlin, OH</u>                                                                                        |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <u>Janet Tobia</u>                                                                           |                                                                 |                  |                           |                        |               | Date: <u>1/22/14</u>        |                   |                        |          |
| Instrument(s)                                                                                                                    |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <u>QRAE</u>                                                                                                        |                                                                 |                  | Model: <u>4 gas meter</u> |                        |               | Manufacturer:               |                   |                        | Model:   |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                 |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| Air Monitoring Data                                                                                                              |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                           | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                 |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                 |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | Drill BW327                                                     | 14°F             | /                         | /                      | /             | 20.9                        | 0                 | 0                      | 0        |
| 7:45                                                                                                                             | ↓<br><u>excavate tie in point</u><br><u>BW334 2" air, 4" fm</u> |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            | ↓<br><u>Drill BW151R</u>                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                 |                  |                           |                        |               |                             |                   |                        |          |

## Air Monitoring Form

|                                     |                   |             |          |
|-------------------------------------|-------------------|-------------|----------|
| Name of Project/Site:               | Wilson II Phase 4 | Project No: | 150,0001 |
| Project/Site Location:              | Obalim, OH        |             |          |
| Employee Performing Air Monitoring: | Samuel Tediz      | Date:       | 1/30/14  |

| Instrument(s)             |                          |               |        |
|---------------------------|--------------------------|---------------|--------|
| Manufacturer: <i>PR2A</i> | Model: <i>Haas meter</i> | Manufacturer: | Model: |

Were instruments calibrated per manufacturer's instructions? ☒ Yes ☐ No Remarks:

### Air Monitoring Data

| Time          | Location and Activity | Ambient Temp<br>(F) | P/FID<br>(ppm) | Benzene<br>(if P/FID ≥ 1) | Ammonia<br>(ppm) | Multi-Gas Detection   |                      |                           |             |
|---------------|-----------------------|---------------------|----------------|---------------------------|------------------|-----------------------|----------------------|---------------------------|-------------|
|               |                       |                     |                |                           |                  | O <sub>2</sub><br>(%) | LEL (Methane)<br>(%) | H <sub>2</sub> S<br>(ppm) | CO<br>(ppm) |
| Action Level: |                       |                     | ≥ 10           | Tube ≥ 1                  | ≥ 25             | ≤ 19.5<br>≥ 22.0      | ≥ 10                 | ≥ 10                      | ≥ 25        |
| 7:30          | install 2" air        | 16°F                | /              | /                         | /                | 20.9                  | 0                    | 0                         | 0           |
| 7:45          | isolation valve in    |                     |                |                           |                  |                       |                      |                           |             |
| 8:00          | 24" pipe trench       |                     |                |                           |                  |                       |                      |                           |             |
| 8:15          | new isolate           |                     |                |                           |                  |                       |                      |                           |             |
| 8:30          | valve                 |                     |                |                           |                  |                       |                      |                           |             |
| 8:45          |                       |                     |                |                           |                  |                       |                      |                           |             |
| 9:00          |                       |                     |                |                           |                  |                       |                      |                           |             |
| 9:15          |                       |                     |                |                           |                  |                       |                      |                           |             |
| 9:30          |                       |                     |                |                           |                  |                       |                      |                           |             |
| 9:45          |                       |                     |                |                           |                  |                       |                      |                           |             |
| 10:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 10:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 10:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 10:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 11:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 11:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 11:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 11:45         | excavate dirt and     |                     |                |                           |                  |                       |                      |                           |             |
| 12:00         | force main isolation  |                     |                |                           |                  |                       |                      |                           |             |
| 12:15         | valve on north        |                     |                |                           |                  |                       |                      |                           |             |
| 12:30         | slope                 |                     |                |                           |                  |                       |                      |                           |             |
| 12:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 13:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 13:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 13:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 13:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 14:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 14:15         | install well heads    |                     |                |                           |                  |                       |                      |                           |             |
| 14:30         | & fabricate pumps     |                     |                |                           |                  |                       |                      |                           |             |
| 14:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 15:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 15:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 15:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 15:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 16:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 16:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 16:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 16:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 17:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 17:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 17:30         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 17:45         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 18:00         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 18:15         |                       |                     |                |                           |                  |                       |                      |                           |             |
| 18:30         |                       |                     |                |                           |                  |                       |                      |                           |             |











| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                                                                                        |                  |                           |                        |               | Project No: <b>150.0001</b> |                   |                        |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|--|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                        |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| Employee Performing Air Monitoring: <b>Tamir Tedia</b>                                                                           |                                                                                        |                  |                           |                        |               | Date: <b>2/3/14</b>         |                   |                        |          |  |
| <b>Instrument(s)</b>                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                        |                  | Model: <b>4 gas meter</b> |                        |               | Manufacturer:               |                   |                        | Model:   |  |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                        |                  |                           |                        |               | Remarks:                    |                   |                        |          |  |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| Time                                                                                                                             | Location and Activity                                                                  | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |  |
|                                                                                                                                  |                                                                                        |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |  |
| Action Level:                                                                                                                    |                                                                                        |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |  |
| 7:30                                                                                                                             | air/pressure testing from scrub ups to north isolation valves<br><br>sway w/ wall/loft | 19°F             | —                         | —                      | —             | 20.9                        | 0                 | 0                      | 0        |  |
| 7:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:00                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:15                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:30                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:00                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:15                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:30                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:00                                                                                                                            | stake air location w/ wall/loft                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |  |



## Air Monitoring Form

| Name of Project/Job: <b>Lorain # Phase 4</b>                                                                                     |                                                                |                  |                           |                        |               | Project No: <b>150,0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Job Location: <b>Oberlin, OH</b>                                                                                         |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Tyler Tolia</b>                                                                           |                                                                |                  |                           |                        |               | Date: <b>2/4/14</b>         |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <b>RAE</b>                                                                                                         |                                                                |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                          | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <b>install air isolation valve on the "y" leg of air lines</b> | <b>10°F</b>      | <b>/</b>                  | <b>/</b>               | <b>/</b>      | <b>20.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |
| 7:45                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                |                  |                           |                        |               |                             |                   |                        |          |

| Name of Project/Site: <u>Loislin II Phase 4</u>                                                                                  |                                                     |                  |                           |                        |               | Project No: <u>150.0001</u> |                   |                        |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|--|
| Project/Site Location: <u>Oberlin, OH</u>                                                                                        |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| Employee Performing Air Monitoring: <u>Janet Todia</u>                                                                           |                                                     |                  |                           |                        |               | Date: <u>2/17/14</u>        |                   |                        |          |  |
| Instrument(s)                                                                                                                    |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| Manufacturer: <u>QRAE</u>                                                                                                        |                                                     |                  | Model: <u>4 gas meter</u> |                        |               | Manufacturer:               |                   |                        | Model:   |  |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| Remarks:                                                                                                                         |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| Air Monitoring Data                                                                                                              |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| Time                                                                                                                             | Location and Activity                               | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |  |
|                                                                                                                                  |                                                     |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |  |
| Action Level:                                                                                                                    |                                                     |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |  |
| 7:30                                                                                                                             | <u>evaluate to liner on all anticipated repairs</u> | 19°F             |                           |                        |               | 20.9                        | 0                 | 0                      | 0        |  |
| 7:45                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:00                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:15                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:30                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:45                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:00                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:15                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:30                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:45                                                                                                                             |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:45                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:00                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:15                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:30                                                                                                                            |                                                     |                  |                           |                        |               |                             |                   |                        |          |  |



|                                                        |                             |
|--------------------------------------------------------|-----------------------------|
| Name of Project/Site: <b>Lorain Tl Phase 4</b>         | Project No: <b>150.0001</b> |
| Project/Site Location: <b>Oberlin, OH</b>              |                             |
| Employee Performing Air Monitoring: <b>Janet Todia</b> | Date: <b>2/19/14</b>        |

**Instrument(s)**

|                           |                          |               |        |
|---------------------------|--------------------------|---------------|--------|
| Manufacturer: <b>QRae</b> | Model: <b>Hgas meter</b> | Manufacturer: | Model: |
|---------------------------|--------------------------|---------------|--------|

|                                                                                                                                  |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------|
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Remarks: |
|----------------------------------------------------------------------------------------------------------------------------------|----------|

**Air Monitoring Data**

| Time          | Location and Activity            | Ambient Temp (F) | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection |                   |                        |          |
|---------------|----------------------------------|------------------|-------------|------------------------|---------------|---------------------|-------------------|------------------------|----------|
|               |                                  |                  |             |                        |               | O <sub>2</sub> (%)  | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level: |                                  |                  | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0    | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30          |                                  | 34°F             | /           | /                      | /             | 20.9                | 0                 | 0                      | 0        |
| 7:45          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 8:00          | KW 227 bore seal repair          |                  |             |                        |               |                     |                   |                        |          |
| 8:15          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 8:30          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 8:45          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 9:00          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 9:15          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 9:30          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 9:45          |                                  |                  |             |                        |               |                     |                   |                        |          |
| 10:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 10:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 10:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 10:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 11:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 11:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 11:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 11:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 12:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 12:15         | KW 101 R2 bore seal repair       |                  |             |                        |               |                     |                   |                        |          |
| 12:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 12:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 13:00         | KW 225 bore seal repair          |                  |             |                        |               |                     |                   |                        |          |
| 13:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 13:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 13:45         | KW 225 bore seal repair          |                  |             |                        |               |                     |                   |                        |          |
| 14:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 14:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 14:30         | KW 226 + KW 228 bore seal repair |                  |             |                        |               |                     |                   |                        |          |
| 14:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 15:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 15:15         | KW 140 R cover repair            |                  |             |                        |               |                     |                   |                        |          |
| 15:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 15:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 16:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 16:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 16:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 16:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 17:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 17:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 17:30         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 17:45         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 18:00         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 18:15         |                                  |                  |             |                        |               |                     |                   |                        |          |
| 18:30         |                                  |                  |             |                        |               |                     |                   |                        |          |



## Air Monitoring Form

| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                                                                        |                  |                           |                        |               | Project No: <b>150,0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                        |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Janet Todia</b>                                                                           |                                                                        |                  |                           |                        |               | Date: <b>2/20/14</b>        |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                        |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                        |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                  | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                        |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                        |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             |                                                                        | 13°F             |                           |                        |               | 20.9                        | 0                 | 0                      | 0        |
| 7:45                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             | boiler seal repair BW 224<br><br>↓<br>trouble shoot 20" wc vacuum loss |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                        |                  |                           |                        |               |                             |                   |                        |          |

## Air Monitoring Form

| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                                                                                                                             |                  |                           |                        |               | Project No: <b>150.0001</b> |                   |                        |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|--|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                        |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| Employee Performing Air Monitoring: <b>Janet Tedia</b>                                                                           |                                                                                                                             |                  |                           |                        |               | Date: <b>2/24/14</b>        |                   |                        |          |  |
| <b>Instrument(s)</b>                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                                                             |                  | Model: <b>4 gas meter</b> |                        |               | Manufacturer:               |                   |                        | Model:   |  |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                                             |                  |                           |                        |               | Remarks:                    |                   |                        |          |  |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| Time                                                                                                                             | Location and Activity                                                                                                       | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |  |
|                                                                                                                                  |                                                                                                                             |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |  |
| <b>Action Level:</b>                                                                                                             |                                                                                                                             |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |  |
| 7:30                                                                                                                             | <b>work on patch area, 20x20, to repair liner due to damage during backfill/excavation to trouble shoot header vac loss</b> | <b>15°F</b>      | <b>/</b>                  | <b>/</b>               | <b>/</b>      | <b>20.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |  |
| 7:45                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:00                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:15                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:30                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:45                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:00                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:15                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:30                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:45                                                                                                                             |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:45                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:00                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:15                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:30                                                                                                                            |                                                                                                                             |                  |                           |                        |               |                             |                   |                        |          |  |







## Air Monitoring Form

| Name of Project/Site: <b>Locain II Phase 4</b>                                                                                   |                                                                                   |                          |             |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|-------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Berlin, OH</b>                                                                                         |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Tamara Tadia</b>                                                                          |                                                                                   |                          |             |                        |               | Date: <b>2/28/14</b>        |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QR2e</b>                                                                                                        |                                                                                   | Model: <b>Hgas meter</b> |             | Manufacturer:          |               | Model:                      |                   |                        |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                   |                          |             |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                             | Ambient Temp (F)         | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                                   |                          |             |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                                   |                          | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             |                                                                                   | 10°F                     |             |                        |               | 20.9                        | 0                 | 0                      | 0        |
| 7:45                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             | fuse pipe on staging area 24" x 24" x force main for east side header replacement |                          |             |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                                   |                          |             |                        |               |                             |                   |                        |          |



## Air Monitoring Form

| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                       |                  |                           |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Berlin, OH</b>                                                                                         |                       |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Jane Todia</b>                                                                            |                       |                  |                           |                        |               | Date: <b>3/4/14</b>         |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                        |                       |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                       |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                       |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                       |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                       |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | base seal repairs     | 6°F              | /                         | /                      | /             | 20.9                        | 0                 | 0                      | 0        |
| 7:45                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                       |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                       |                  |                           |                        |               |                             |                   |                        |          |



## Air Monitoring Form

| Name of Project/Site: <b>Lebanon II Phase 4</b>                                                                                  |                                            |                  |                           |                        |               | Project No: <b>152.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                        |                                            |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Janet Tedia</b>                                                                           |                                            |                  |                           |                        |               | Date: <b>3/5/14</b>         |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <b>Q&amp;E</b>                                                                                                     |                                            |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                            |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| <b>Air Monitoring Data</b>                                                                                                       |                                            |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                      | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                            |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                            |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <b>Lechate Vault repair near RDI plant</b> | <b>10°F</b>      | <b>—</b>                  | <b>—</b>               | <b>—</b>      | <b>20.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |
| 7:45                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                            |                  |                           |                        |               |                             |                   |                        |          |







| Name of Project/Site: <b>Korain II Phase 4</b>                                                                                   |                                                                                        |                  |                           |                        |               | Project No: <b>150-0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Obelisk OH</b>                                                                                         |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Sept 10/14</b>                                                                            |                                                                                        |                  |                           |                        |               | Date: <b>3/7/14</b>         |                   |                        |          |
| Instrument(s)                                                                                                                    |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                        |                  | Model: <b>4 gas meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                        |                  |                           |                        |               | Remarks:                    |                   |                        |          |
| Air Monitoring Data                                                                                                              |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                                  | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                                        |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                                        |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | Completed 24" header replacement w/ dual contained 2"x4" 2" air line; EW 31R to EW 32R | 42°F             |                           |                        |               | 20.9                        | 0                 | 0                      | 0        |
| 7:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                                        |                  |                           |                        |               |                             |                   |                        |          |



## Air Monitoring Form

## Air Monitoring Form

[illegible]

## Air Monitoring Form

| Name of Project/Site: <b>Korwin II Phase 4</b>                                                                                                 |                                                         |                           |             |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------|-------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Oberlin, OH</b>                                                                                                      |                                                         |                           |             |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Janet Bodin</b>                                                                                         |                                                         |                           |             |                        |               | Date: <b>3/17/14</b>        |                   |                        |          |
| Instrument(s)                                                                                                                                  |                                                         |                           |             |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                                      |                                                         | Model: <b>4 gas meter</b> |             | Manufacturer:          |               |                             | Model:            |                        |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      Remarks: |                                                         |                           |             |                        |               |                             |                   |                        |          |
| Air Monitoring Data                                                                                                                            |                                                         |                           |             |                        |               |                             |                   |                        |          |
| Time                                                                                                                                           | Location and Activity                                   | Ambient Temp (F)          | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                                |                                                         |                           |             |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                                  |                                                         |                           | ≥10         | Tube ≥ 1               | ≥25           | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 7:45                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                                           | continue 24" 2x4" & 2" toward road, hauling waste today | 26°F                      | /           | /                      | /             | 20.9                        | 0                 | 0                      | 0        |
| 9:15                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                                           |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                                          |                                                         |                           |             |                        |               |                             |                   |                        |          |



# Air Monitoring Form

|                                                     |  |                             |
|-----------------------------------------------------|--|-----------------------------|
| Name of Project/Site: <u>Loxian II Phase 4</u>      |  | Project No: <u>150-0001</u> |
| Project/Site Location: <u>Obelisk, OH</u>           |  |                             |
| Employee Performing Air Monitoring: <u>Tom Tadi</u> |  | Date: <u>3/21/14</u>        |

| Instrument(s)                                                                                                                    |                           |               |        |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------|--------|
| Manufacturer: <u>QRAE</u>                                                                                                        | Model: <u>4 gas meter</u> | Manufacturer: | Model: |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                           |               |        |

| Air Monitoring Data |                                                              |                  |             |                        |               |                     |                   |                        |          |
|---------------------|--------------------------------------------------------------|------------------|-------------|------------------------|---------------|---------------------|-------------------|------------------------|----------|
| Time                | Location and Activity                                        | Ambient Temp (F) | P/FID (ppm) | Benzene (If P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection |                   |                        |          |
|                     |                                                              |                  |             |                        |               | O <sub>2</sub> (%)  | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:       |                                                              |                  | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0    | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                | 24" pipe fuse (2)<br>4" lateral branch<br>saddles w/ gaskets | 22°F             | /           | /                      | /             | 20.9                | 0                 | 0                      | 0        |
| 7:45                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 8:00                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 8:15                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 8:30                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 8:45                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 9:00                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 9:15                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 9:30                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 9:45                |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 10:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 10:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 10:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 10:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 11:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 11:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 11:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 11:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 12:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 12:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 12:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 12:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 13:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 13:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 13:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 13:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 14:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 14:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 14:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 14:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 15:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 15:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 15:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 15:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 16:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 16:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 16:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 16:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 17:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 17:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 17:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 17:45               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 18:00               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 18:15               |                                                              |                  |             |                        |               |                     |                   |                        |          |
| 18:30               |                                                              |                  |             |                        |               |                     |                   |                        |          |

## Air Monitoring Form

| Name of Project/Site: <b>Loran II Phase 4</b>                                                                                    |                                                                                         |                  |                           |                        |               | Project No: <b>150,0001</b> |                   |                        |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------|---------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|--|
| Project/Site Location: <b>050/112, OH</b>                                                                                        |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| Employee Performing Air Monitoring: <b>Janet Todia</b>                                                                           |                                                                                         |                  |                           |                        |               | Date: <b>3/24/14</b>        |                   |                        |          |  |
| <b>Instrument(s)</b>                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                         |                  | Model: <b>4 gas meter</b> |                        |               | Manufacturer:               |                   |                        | Model:   |  |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                         |                  |                           |                        |               | Remarks:                    |                   |                        |          |  |
| <b>Air Monitoring Data</b>                                                                                                       |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| Time                                                                                                                             | Location and Activity                                                                   | Ambient Temp (F) | P/FID (ppm)               | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |  |
|                                                                                                                                  |                                                                                         |                  |                           |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |  |
| Action Level:                                                                                                                    |                                                                                         |                  | ≥ 10                      | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |  |
| 7:30                                                                                                                             | continue excavation of 24" on south end of haul road slightly into road to obtain grade | 26°F             | —                         | —                      | —             | 20.9                        | 0                 | 0                      | 0        |  |
| 7:45                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:00                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:15                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:30                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 8:45                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:00                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:15                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:30                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 9:45                                                                                                                             |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 10:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 11:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 12:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 13:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 14:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 15:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 16:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 17:45                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:00                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:15                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |
| 18:30                                                                                                                            |                                                                                         |                  |                           |                        |               |                             |                   |                        |          |  |









| Name of Project/Site: <b>Larkin II Phase 4</b>                                                                                   |                                              |                  |                         |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------|-------------------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Oberlin OH</b>                                                                                         |                                              |                  |                         |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Fanot Todia</b>                                                                           |                                              |                  |                         |                        |               | Date: <b>3/26/14</b>        |                   |                        |          |
| Instrument(s)                                                                                                                    |                                              |                  |                         |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRee</b>                                                                                                        |                                              |                  | Model: <b>Hg2 meter</b> |                        | Manufacturer: |                             |                   | Model:                 |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                              |                  |                         |                        |               | Remarks:                    |                   |                        |          |
| Air Monitoring Data                                                                                                              |                                              |                  |                         |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                        | Ambient Temp (F) | P/FID (ppm)             | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                              |                  |                         |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                              |                  | ≥ 10                    | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <b>continue 24" header repair @ road end</b> | <b>36°F</b>      | /                       | /                      | /             | <b>20.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |
| 7:45                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                              |                  |                         |                        |               |                             |                   |                        |          |



| Name of Project/Site: <b>Lorain II Phase 4</b>                                                                                   |                                                                                                                                                      |                           |             |                        |               | Project No: <b>150.0001</b> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <b>Berkshire OH</b>                                                                                       |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <b>Jana Todia</b>                                                                            |                                                                                                                                                      |                           |             |                        |               | Date: <b>3/31/14</b>        |                   |                        |          |
| <b>Instrument(s)</b>                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| Manufacturer: <b>QRAE</b>                                                                                                        |                                                                                                                                                      | Model: <b>4 gas meter</b> |             | Manufacturer:          |               | Model:                      |                   |                        |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                                                                                      |                           |             |                        |               | Remarks:                    |                   |                        |          |
| Air Monitoring Data                                                                                                              |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                                                                                                                | Ambient Temp (F)          | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                                                                                                                      |                           |             |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                                                                                                                      |                           | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <b>continue completion of 2nd repair at road &amp; excavate &amp; install 2' dia &amp; 2' force main at RW 317 to get out of way of active phase</b> | <b>36°F</b>               | /           | /                      | /             | <b>22.9</b>                 | <b>0</b>          | <b>0</b>               | <b>0</b> |
| 7:45                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                                                                                                                      |                           |             |                        |               |                             |                   |                        |          |



[illegible]





# Air Monitoring Form

| Name of Project/Site: <u>Lorain # Phase 4</u>                                                                                    |                                                        |                           |             |                        |               | Project No: <u>150.0001</u> |                   |                        |          |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------|-------------|------------------------|---------------|-----------------------------|-------------------|------------------------|----------|
| Project/Site Location: <u>Oberlin OH</u>                                                                                         |                                                        |                           |             |                        |               |                             |                   |                        |          |
| Employee Performing Air Monitoring: <u>Janet Todia</u>                                                                           |                                                        |                           |             |                        |               | Date: <u>4/2/14</u>         |                   |                        |          |
| Instrument(s)                                                                                                                    |                                                        |                           |             |                        |               |                             |                   |                        |          |
| Manufacturer: <u>QRAE</u>                                                                                                        |                                                        | Model: <u>H gas meter</u> |             | Manufacturer:          |               | Model:                      |                   |                        |          |
| Were instruments calibrated per manufacturer's instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                        |                           |             |                        |               |                             |                   |                        |          |
| Remarks:                                                                                                                         |                                                        |                           |             |                        |               |                             |                   |                        |          |
| Air Monitoring Data                                                                                                              |                                                        |                           |             |                        |               |                             |                   |                        |          |
| Time                                                                                                                             | Location and Activity                                  | Ambient Temp (F)          | P/FID (ppm) | Benzene (if P/FID ≥ 1) | Ammonia (ppm) | Multi-Gas Detection         |                   |                        |          |
|                                                                                                                                  |                                                        |                           |             |                        |               | O <sub>2</sub> (%)          | LEL (Methane) (%) | H <sub>2</sub> S (ppm) | CO (ppm) |
| Action Level:                                                                                                                    |                                                        |                           | ≥ 10        | Tube ≥ 1               | ≥ 25          | ≤ 19.5<br>≥ 22.0            | ≥ 10              | ≥ 10                   | ≥ 25     |
| 7:30                                                                                                                             | <u>finish 24" repair to completion w/ RW30 lateral</u> | <u>55°F</u>               | <u>/</u>    | <u>/</u>               | <u>/</u>      | <u>20A</u>                  | <u>0</u>          | <u>0</u>               | <u>0</u> |
| 7:45                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 8:00                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 8:15                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 8:30                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 8:45                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 9:00                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 9:15                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 9:30                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 9:45                                                                                                                             |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 10:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 10:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 10:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 10:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 11:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 11:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 11:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 11:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 12:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 12:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 12:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 12:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 13:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 13:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 13:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 13:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 14:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 14:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 14:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 14:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 15:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 15:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 15:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 15:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 16:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 16:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 16:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 16:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 17:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 17:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 17:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 17:45                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 18:00                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 18:15                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |
| 18:30                                                                                                                            |                                                        |                           |             |                        |               |                             |                   |                        |          |





## APPENDIX I – Pipeline Pressure Test Results





## 2013 GCCS - Phase 4 and 2014 GCCS Phase 1 Construction Certification Report - Pipe Pressure Test Results

| Date                | HDPE Pipe Description | Length<br>(feet)                                                                 | Pressure<br>(psf) | Time<br>(hours) | Result<br>(Pass/Fail) | Retest<br>(Yes/No) |
|---------------------|-----------------------|----------------------------------------------------------------------------------|-------------------|-----------------|-----------------------|--------------------|
| 12/18/13 - 12/19/13 | 12" SDR 17            | entire 12" header from isolation valve to tie in connection point on north slope | 10                | 14              | Pass                  | No                 |
| 1/13/14 - 1/14/14   | 6" SDR17              | lateral to remote EW42R2 from 12"                                                | 25                | 13              | Pass                  | No                 |
|                     | 6" SDR17              | lateral to remote EW45R3 to 12"                                                  | 25                | 13              | Pass                  | No                 |
|                     | 6" SDR17              | lateral to remote EW46R2 from 12"                                                | 25                | 13              | Pass                  | No                 |
| 1/16/14             | 6" SDR17              | EW303R to EW307R                                                                 | 25                | 4               | Pass                  | No                 |
| 1/17/14             | 6" SDR17              | EW332 to EW301                                                                   | 25                | 4               | Pass                  | No                 |
| 1/20/14             | 2" SDR09 (air)        |                                                                                  | 100               | 4               | Pass                  | No                 |
|                     | 4" SDR11 (forcemain)  |                                                                                  | 50                | 4               | Pass                  | No                 |
|                     | 6" SDR17              | 2" air, 4" force main, 6" lateral EW333 to EW331 to EW330 to 12" tie in point    | 25                | 4               | Pass                  | No                 |
| 1/21/14             | 6" SDR17              | 6" lateral from 12" tie in point to EW328                                        | 25                | 4               | Pass                  | No                 |
| 1/21/14 - 1/22/14   | 2" SDR09 (air)        |                                                                                  | 100               | 10              | Pass                  | No                 |
|                     | 4" SDR11 (force main) | 2" air, 4" forcem main EW334 to 12" tie in point                                 | 50                | 10              | Pass                  | No                 |
| 1/23/14             | 6" SDR17              | 6" lateral from EW327 to EW172                                                   | 25                | 4               | Pass                  | No                 |
| 1/23/14             | 6" SDR17              | 6" lateral from 12" tie in point to EW173                                        | 25                | 4               | Pass                  | No                 |





2013 GCCS - Phase 4 and 2014 GCCS Phase 1 Construction Certification Report - Pipe Pressure Test Results

| Date    | HDPE Pipe Description        | Length<br>(feet)                                                                                                                                                     | Pressure<br>(psi) | Time<br>(hours) | Result<br>(Pass/Fail) | Retest<br>(Yes/No) |
|---------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|-----------------------|--------------------|
| 2/13/14 | 2" SDR09 (air)               | 2" air, 4" force<br>main all runs<br>EW329 to 12",<br>EW328 to 12",<br>12" to EW327 to<br>EW54R2<br>to EW50R3<br>continuing to<br>termination at<br>isolation valves | 100               | 4               | Pass                  | No                 |
|         | 4" SDR11 (force main)        | entire emergency<br>repair from EW30<br>to tie in point<br>south of the haul<br>road                                                                                 | 50                | 4               | Pass                  | No                 |
| 3/24/14 | 24" SDR26                    |                                                                                                                                                                      | 10                | 4               | Pass                  | No                 |
|         | 2" x 4" dual contained SDR11 | entire emergency<br>repair from EW30<br>to tie in point<br>south of the haul<br>road                                                                                 | 50 x 60           | 4               | Pass                  | No                 |
| 3/26/14 | 2" SDR09 (air)               | entire emergency<br>repair from EW30<br>to tie in point<br>south of the haul<br>road                                                                                 | 100               | 4               | Pass                  | No                 |
| 4/1/14  | 2" SDR09 (air)               |                                                                                                                                                                      | 100               | 4               | Pass                  | No                 |
|         | 6" SDR17                     | EW51R3 to<br>EW50R3                                                                                                                                                  | 25                | 4               | Pass                  | No                 |
|         | 3" SDR11 (force main)        |                                                                                                                                                                      | 50                | 4               | Pass                  | No                 |

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