



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

11/20/2014

MarkWest Utica EMG LLC
Attn: Frank W. Semple, CEO
1515 Arapahoe Street Tower 1
Suite 1600
Denver, CO 80202-2137

RE: Director's Final Findings and Orders
NPDES
Harrison County
8OU00001

Ladies and Gentlemen:

Transmitted herewith is one copy of the Director's Final Findings and Orders in the referenced matter.

Sincerely,

Ed Swindall, Supervisor
Permit Processing Unit
Division of Surface Water

ERS/dks

Enclosure

CERTIFIED MAIL

cc: M. Mann, DSW
R. DeMuth, DSW
B. Schuch, DSW
L. Reeder, DSW
A. Ward, DSW
J. Martin, DSW
J. Witte, SEDO/DSW
Compliance Section
M. McCarron, PIC
H. Griesmer, PIC
B. Fischbein, Legal
P. Fallah, DEFA
Journal Room
File

OHIO E.P.A.

BEFORE THE

NOV 20 2014

OHIO ENVIRONMENTAL PROTECTION AGENCY

ENTERED DIRECTOR'S JOURNAL

In the Matter of:

MarkWest Utica-EMG-LLC
1515 Arapahoe Street, Tower 1
Suite 1600
Denver, Colorado 80202-2137

: Director's Final
: Findings and Orders
:
:

Respondent

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to MarkWest Utica EMG, LLC ("Respondent"), pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §6111.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of Respondent or the Facility (as hereinafter defined) shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 6111. and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Respondent is the owner and operator of the hydraulic directional drilling operations located at approximately 40°15'10.80" N, 81°2'38.32" W ("Facility 1") and 40°11'18.17" N, 81°4'56.02" W (Facility 2), Harrison County, Ohio.
2. Boggs Fork is in the Ohio River Basin and is a "water of the state" as that term is defined in ORC § 6111.01. Boggs Fork is designated as a warmwater habitat stream (WWH) in accordance with Ohio Administrative Code ("OAC") 3745-1-24.

3. The wetland adjacent to Boggs Fork is in the Ohio River Basin and is a "water of the state" as that term is defined in ORC § 6111.01. The emergent wetland is designated as a Category 2 or 3 gray zone wetland, based on an Ohio Rapid Assessment Method (ORAM) score of 64.
4. Brushy Fork is in the Ohio River Basin and is a "water of the state" as that term is defined in ORC § 6111.01. Brushy Fork is classified as a warmwater habitat stream (WWH) in accordance with OAC 3745-1-16.
5. The wetland adjacent to Brushy Fork is in the Ohio River Basin and is a "water of the state" as that term is defined in ORC § 6111.01. The emergent wetland is designated as a Category 2 wetland, based on an Ohio Rapid Assessment Method (ORAM) score of 33.
6. The wetland near Interstate 70 and Egypt Valley Road is in the Ohio River Basin and is a "water of the state" as that term is defined in ORC § 6111.01. The emergent wetland is believed to be a Category 2 wetland, although an Ohio Rapid Assessment Method (ORAM) score has not been conducted to date.
7. In accordance with ORC § 6111.04, no person may discharge any pollutant or cause, permit, or allow a discharge of any pollutant to waters of the state without applying for and obtaining a valid permit.
8. OAC Rule 3745-1-04 provides, in part, that the following general water quality criteria shall apply to all surface waters of the state including mixing zones: To every extent practical and possible as determined by the Director, these waters shall be: (A) Free from suspended solids or other substances that enter the waters as a result of human activity and that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life; and (C) Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance.
9. OAC Rule 3745-1-51 provides, in part, that (A) Hydrology necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on: (1) Water currents, erosion, or sedimentation patterns; (3) Chemical, nutrient, and dissolved oxygen regimes of the wetland; (4) The movement of aquatic fauna; and (6) Water levels or elevations, including those resulting from ground water recharge and discharge and (C) Conditions shall not occur that will have a significant adverse impact on the ability of the wetland to be used for wetland-dependent recreational opportunities in or on the water.

September 17, 2012 Bentonite Clay Release

10. On September 17, 2012, Respondent's boring operations resulted in a release of an undetermined amount of bentonite clay solution (consisting of water and bentonite clay) into Brushy Fork (impacting in varying degrees, up to approximately 0.19 miles (1,000 LF)) and to an adjacent 15 acre Category 2 wetland (impacting in varying degrees, up to 3 acres), potentially temporarily impacting fish, insects, macroinvertebrates, and temporarily affecting habitat of birds, and mammals. The discharge from the borehole was a point source discharge of a pollutant, as defined in OAC Rule 3745-33-01 (AA). The release was located South of Route 22 near Freeman Road in the city of Cadiz, Harrison County (approximately 40°15'10.80"N/81°2'38.32"W). Respondent immediately reported the incident to the Ohio EPA Emergency Response Line and implemented its response plan and restoration actions. During a conference call, Ohio EPA provided the Respondent the Agency's expectations of the initial response.
11. Respondent discharged bentonite clay solution into Brushy Fork and adjacent wetland on September 17, 2012, without obtaining an Ohio NPDES permit or obtaining authorization to discharge under a general NPDES permit, in violation of ORC §§ 6111.04 and 6111.07, and OAC Rules 3745-33-02(A) and 3745-38-02(A) or without obtaining a 401 water quality certification (WQC) or coverage under a general 401 WQC, in violation of ORC § 6111.04.
12. Respondent's clay solution discharge on September 17, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(A) to be violated by depositing substances into Brushy Fork and adjacent wetland as a result of human activity that settled to form objectionable deposits and that adversely affected aquatic life.
13. Respondent's clay solution discharge on September 17, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(C) to be violated by discharging substances into Brushy Fork and adjacent wetland as a result of human activity that altered the natural color or other conditions of Brushy Fork and adjacent wetland in such a degree as to create a nuisance.
14. Respondent's clay solution discharge on September 17, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(A) to be violated by causing adverse impacts on the Brushy Fork adjacent Category 2 wetland's sedimentation patterns, dissolved oxygen regimes, movement of fauna and water elevations.
15. Respondent's clay discharge on September 17, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(C) to be violated by making a

condition occur that has an adverse impact on the ability of the Brushy Fork adjacent Category 2 wetland to be used for wetland-dependent recreational opportunities in or on the water.

16. On September 18, 2012 Ohio EPA personnel did a site investigation and found Respondent's response to be inadequate. Respondent received a Notice of Response and Regulatory Interest from Ohio EPA.
17. On September 20, 2012 Ohio EPA personnel did a site inspection and provided Respondent with additional guidance on response actions.

October 10, 2012 Bentonite Clay Release

18. On October 10, 2012, Respondent released additional bentonite clay solution as a result of the bore hole collapsing in front of the drill. The bentonite clay solution was released into the same 15 acre Category 2 wetland impacted by the September 17, 2012 release (impacting an additional 1 acre). Respondent immediately reported the incident to the Ohio EPA Emergency Response Line and implemented its response plan and restoration actions. Ohio EPA personnel did a site investigation and gave Respondent a Notice of Response and Regulatory Interest. Respondent's response to this release was to shut down the drill and contain the release.
19. Respondent discharged bentonite clay solution into Brushy Fork and adjacent wetland on October 10, 2012, without obtaining an Ohio NPDES permit or obtaining authorization to discharge under a general NPDES permit, in violation of ORC §§ 6111.04 and 6111.07, and OAC Rules 3745-33-02(A) and 3745-38-02(A) or without obtaining a 401 water quality certification (WQC) or coverage under a general 401 WQC, in violation of ORC § 6111.04.
20. Respondent's clay solution discharge on October 10, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(A) to be violated by depositing substances into Brushy Fork and adjacent wetland as a result of human activity that settled to form objectionable deposits and that adversely affected aquatic life.
21. Respondent's clay solution discharge on October 10, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(C) to be violated by discharging substances into Brushy Fork and adjacent wetland as a result of human activity that altered the natural color or other conditions of Brushy Fork and adjacent wetland in such a degree as to create a nuisance.

22. Respondent's clay discharge on October 10, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(A) to be violated by causing adverse impacts on the Brushy Fork adjacent Category 2 wetland's sedimentation patterns, dissolved oxygen regimes, movement of fauna and water elevations.
23. Respondent's clay discharge on October 11, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(C) to be violated by making a condition occur that has a potentially adverse impact on the ability of the Brushy Fork adjacent Category 2 wetland to be used for wetland-dependent recreational opportunities in or on the water.

November 4, 2012 Bentonite Clay Release

24. On November 4, 2012, during the installation of a different pipeline Respondent released bentonite clay solution into Boggs Fork (impacting in varying degrees, up to 1.5 miles (7,920 LF) of Boggs Fork) and adjacent 46.5 acre Category 2 or 3 gray zone wetland (impacting up to 4 acres). Ohio EPA observed turbidity in Boggs Fork and adjacent wetland. The release was located near Jockey Hollow Road and Muntz Road in the City of Cadiz, Harrison County (approximately 40°11'18.17"N/81°4'56.02"W). Upon discovery, Respondent immediately reported the incident to the Ohio EPA Emergency Response Line and implemented its response plan and restoration actions. Released bentonite clay solution was observed to be approximately 10 inches thick in portions of the impacted wetland and for maximum of 1-2 feet thick against the straw bales placed as part of Respondent's response plan in Boggs Fork.
25. Respondent discharged bentonite clay solution into Boggs Fork and adjacent wetland on November 4, 2012, without obtaining an Ohio NPDES permit or obtaining authorization to discharge under a general NPDES permit, in violation of ORC §§ 6111.04 and 6111.07, and OAC Rules 3745-33-02(A) and 3745-38-02(A) or without obtaining a 401 water quality certification (WQC) or coverage under a general 401 WQC, in violation of ORC § 6111.04.
26. Respondent's clay solution discharge on November 4, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(A) to be violated by depositing substances into Boggs Fork and adjacent wetland as a result of human activity that settled to form objectionable deposits and that potentially adversely affected aquatic life.
27. Respondent's clay solution discharge on November 4, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-04(C) to be violated by

- discharging substances into Boggs Fork and adjacent wetland as a result of human activity that altered the natural color or other conditions of Boggs Fork and adjacent wetland in such a degree as to create a nuisance.
28. Respondent's clay solution discharge on November 4, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(A) to be violated by causing adverse impacts on the Boggs Fork adjacent Category 2 or 3 gray zone wetland's sedimentation patterns, dissolved oxygen regimes, movement of fauna and water elevations.
 29. Respondent's clay solution discharge on November 4, 2012 temporarily caused the water quality standards found in OAC Rule 3745-1-51(C) to be violated by making a condition occur that has an adverse impact on the ability of the Boggs Fork adjacent Category 2 or 3 gray zone wetland to be used for wetland-dependent recreational opportunities in or on the water.
 30. Respondent had determined that the least impactful and most thorough and predictable cleanup method was the use of vacuum trucks, hand tools and manual labor, although this would take considerably more time to complete.
 31. On November 16, 2012 Ohio EPA inspected the cleanup progress of Boggs Fork. Respondent's contractors were observed continuing to remove bentonite clay from the stream. Cleanup activities were completed in approximately 3 ½ months.
 32. Respondent boring operations resulted in a release of bentonite clay solution at the dates, locations and into the water resources listed in the Table 1 below:

Table 1

Date	Location	Volume of Spill	Resource Impacted
2/12/13	Interstate 70 and Egypt Valley Road, Belmont County	130 Gallons	Wetland
3/9/13	Interstate 70 and Egypt Valley Road, Belmont County	200-300 Gallons	Wetland
3/13/13	State Route 22,	100 Gallons	Wetland

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	Harrison County		
3/27/13	State Route 331	200-300 Gallons	Trail Run
5/4/13	Barnesville Hendrysburg Road, Harrison County	800 Gallons	Spencer Creek
6/20/13	SR 513/Miltonsburg Calais Road, Monroe County	35 Gallons	Unnamed perennial stream
6/23/13	Route 265 and Shannon Road, Guernsey County	60 Gallons	Wetland
6/26/14	Douglas and Fairview Roads, Belmont County	40 Gallons	Wetland
6/28/13	State Route 265 and Shannon Run Road, Guernsey County	150 Gallons	Wetland
6/30/13	North Road and Riggs Hollow Road, Harrison County	10 Gallons	Wetland
7/6/13	State Route 147 and Ryan Road, City of Barnesville	80 Gallons	Wetland and unnamed stream
7/7/13	Greenlawn Street and North Main Street	45 Gallons	Stream
7/18/13	Miltonsburg Calais Road and SR 379	1,200 Gallons	Upland area and Wetland.
8/18/13	Skull Fork Road and State Route 800, Harrison	50 Gallons	Stillwater Creek

	County		
8/21/13	Skull Fork Road and State Route 800, Harrison County	150 Gallons	Stillwater Creek
11/1/13	State Route 513 and Oxford Road, Guernsey County	35 Gallons	Tributary to Salt Fork Creek

33. Respondent discharged of bentonite clay solution into waters of the state listed in Table 1 occurred without obtaining an Ohio NPDES permit or obtaining authorization to discharge under a general NPDES permit, in violation of ORC §§ 6111.04 and 6111.07, and OAC Rules 3745-33-02(A) and 3745-38-02(A) or without obtaining a 401 water quality certification (WQC) or coverage under a general 401 WQC, in violation of ORC § 6111.04.
34. Respondent's clay solution discharges listed in Table 1 temporarily caused the water quality standards found in OAC Rule 3745-1-04(A) to be violated by depositing substances into waters of the state as a result of human activity that settled to form objectionable deposits and that potentially adversely affected aquatic life.
35. Respondent's clay solution discharges listed in Table 1 temporarily caused the water quality standards found in OAC Rule 3745-1-04(C) to be violated by discharging substances into waters of the state as a result of human activity that altered the natural color or other conditions of the affected waters in such a degree as to create a nuisance.
36. Respondent's clay solution discharges listed in Table 1 that occurred in wetlands temporarily caused the water quality standards found in OAC Rule 3745-1-51(A) to be violated affecting sedimentation patterns, dissolved oxygen regimes, movement of fauna and water elevations.
37. Compliance with ORC Chapter 6111 is not contingent upon the availability or receipt of financial assistance.
38. The Director has given consideration to and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and its relation to the benefits to the people of the

State to be derived from such compliance in accomplishing the purposes of ORC Chapter 6111.

V. ORDERS

1. Within three (3) months after the effective date of these Orders, Respondent shall submit to Ohio EPA, Southeast District Office, for review and approval, a Release Prevention and Emergency Response Plan ("the Release Response Plan") that identifies measures to protect public health and the environment. The Release Response Plan shall, at a minimum:
 - a. Describe steps that will be taken to prevent, or minimize to the extent practicable, releases from occurring. This shall include, but is not limited to, implementing protocols that require a geotechnical engineer or qualified geologist to determine the suitability of the soils to be bored to minimize the potential for an inadvertent release, ensuring all field personnel understand the signs that an inadvertent release has occurred and their responsibility for immediate response and reporting, and maintaining all response equipment on-site and in good working order;
 - b. Describe devices and mechanisms, if any that will be installed and operated to ensure that Respondent is made aware of all clay solution releases. This shall include, but is not limited to, ensuring all directional drilling is attended by monitoring staff to watch for inadvertent release conditions or low pressure readings;
 - c. Establish procedures to be followed in the event of a clay solution release in order to ensure that Ohio EPA is notified within 30 minutes, whether through the hotline or directly; these shall include procedures to ensure immediate appropriate notification to the Ohio EPA, Ohio Department of Natural Resources Division of Oil and Gas and Division of Wildlife. These procedures should be developed in consultation with potentially affected entities;
 - d. Establish procedures to ensure that appropriate personnel are aware of and follow the Release Response Plan and are appropriately trained; and
 - e. Establish a method for obtaining and communicating the location of any future release in the form of accurate GPS coordinates to Ohio EPA and other responding agencies.

If Ohio EPA provides written comments to Respondent's Release Response Plan

as originally submitted, Respondent shall submit to Ohio EPA a revised plan or other written response to Ohio EPA's comments within one (1) month after receiving Ohio EPA's comments.

Within seven (7) days of Ohio EPA's approval of the Release Response Plan, Respondent shall implement the Plan. The Plan shall be reviewed annually by the Respondent and updated if needed.

2. Within thirty (30) days from the effective date of these Orders, Respondent shall submit a Brushy Fork Stream and Wetland Restoration and Monitoring Plan (Brushy Fork Restoration Plan) addressing the restoration and monitoring of the affected portion of Brushy Fork and its associated wetlands to Ohio EPA Central Office, 401 Wetlands/Environmental Mitigation Section for review and approval. The plan must include the following elements:
 - a. A planting plan for re-vegetating exposed areas, if any, present. The planting plan should include seeding with herbaceous cover to provide immediate and long term stabilization.
 - b. A Stream Restoration Component which is further detailed in Order 3.
 - c. A Wetland Restoration Component which is further detailed in Orders 4.
 - d. A schedule for implementation that commences upon approval by the Ohio EPA.
3. The Stream Restoration Component of the Brushy Fork Restoration Plan shall include a monitoring plan sufficient to characterize current channel conditions, the restored channel conditions, habitat quality, and the biological water quality within the remediation/restored area, and at upstream and downstream locations in order to document the success of the stream restoration efforts. The stream monitoring plan shall be developed in conformance to requirements in Order 8.
4. The Brushy Fork Wetland Restoration Component shall address on-site restoration of the 4 impacted acres of Category 2 wetland adjacent to Brushy Fork and shall include a monitoring plan developed in accordance with Order 9 sufficient to characterize current conditions, habitat quality, and final restoration conditions to document the success of restoration efforts. The wetland restoration shall achieve a Vegetative Index of Biotic Integrity (VIBI) score indicative of the appropriate wetland category (to be of equal or higher quality than pre-impact conditions) for each of the impacted wetlands.

5. Within 30-days from the effective date of these Orders, Respondent shall submit a Jockey Hollow Restoration and Enhancement Plan to protect and enhance and the wetland/Boggs Fork stream complex located near Jockey Hollow Road and Muntz Road near the City of Cadiz, Harrison County", (the "Enhancement Plan") for approval by Ohio EPA. The goals of the Enhancement Plan shall be:
 - a. To restore the portions of Boggs Fork and surrounding wetlands impacted by Respondent's discharges;
 - b. To enhance 43 acres of Category 2-3 gray zone wetlands that currently exist on site to score of a minimum ORAC score of 65, indicative of a Category 3 wetland or a VIBI score of 63 or higher within five years of the effective date of these Orders; and
 - c. To protect the existing streams and wetlands in the complex with an environmental covenant to ensure the protection of the stream/wetlands in perpetuity.
6. The Enhancement Plan shall include:
 - a. Performance criteria designed to ensure the attainment of Category 3 status for the wetlands;
 - b. Baseline sampling to assess the current VIBI scores of the wetlands to be enhanced;
 - c. Contingencies to conduct additional work, to extend the monitoring period, or both as required to meet the established performance criteria should the monitoring data reveal that the criteria have not been met; and
 - d. An implementation schedule that commences upon approval by the Ohio EPA.
7. If Ohio EPA provides written comments to the plans submitted under Orders 2 and 5, Respondent shall submit to Ohio EPA a revised plan or other written responses to Ohio EPA's comments within 30-days after receiving Ohio EPA's comments.
8. Stream monitoring requirements under this Order shall include the following:
 - a. The channel shall be surveyed to accurately identify and characterize where any remaining clay deposits are located in order to facilitate removal of those remaining deposits.
 - b. Habitat and biological monitoring:

- i) Respondent shall assess the habitat quality and the fish and macroinvertebrate communities at three (3) locations for each stream following the completion of the stream restoration activities. Respondent shall conduct sampling capable of calculating the Index of Biotic Integrity (IBI) for the fish communities, qualitative macroinvertebrate sampling at all three locations. Habitat quality shall be assessed using either the Headwater Habitat Evaluation Index (HHEI) or the Qualitative Habitat Evaluation Index (QHEI) where appropriate and relevant.
 - ii) Habitat and biological baseline shall be based on the only information known, which is data recorded by Ohio EPA's water quality group for downstream of the impacted area.
 - iii) All sampling methods and data calculations shall be in accordance with those specified in Chapter Rule 3745-1-03 of the Ohio Administrative Code. The biological data shall meet the requirements of Level 3 Credible data in accordance with OAC Rule 3745-4-06.
 - iv) The results of each of the biological and habitat evaluations shall be reported to the Ohio EPA within 90 days of the completion of field sampling activities.
9. Wetland monitoring shall be conducted for five years from the approval of the plans required by Orders 2 and 5. Ohio EPA will require additional monitoring if the wetlands do not achieve the appropriate status quality on or before the second or fifth year respectively of wetland monitoring. The wetland monitoring requirements under this Order shall include the following:
- a. Monitoring Reports: Annual reports containing the data listed in the appropriate subsections below shall be submitted to Ohio EPA for each of the two consecutive years following completion of restoration activities. The first annual report is due to Ohio EPA by December 31 of the first full year following completion of restoration activities. All subsequent reports shall be submitted by December 31st of each of the subsequent monitoring years. Respondent may include any additional information that it believes relevant for Ohio EPA's consideration.
 - b. As-built Drawings: At a minimum, the annual reports shall contain current drawings no larger than 11" by 17" of each wetland restoration project.

- c. Photographs: Representative observation points shall be selected in each plant community type in each distinct mitigation area. This shall be a point which best represents the characteristics of the entire plant community. The observation points shall be marked on the base map. Respondent shall take photographs from these points annually. Each color photo point shall be photo documented from the same position and angle during July/August of each monitoring year.
- d. 2nd Year Site Visit: Respondent shall arrange a meeting and site visit with Ohio EPA during the growing season after the first year report has been submitted. The purpose of this inspection is to determine if the restoration project has been constructed in accordance with the agreement between the applicant and Ohio EPA. If necessary, Ohio EPA may make recommendations to improve the restoration project. Respondent is responsible for undertaking any reasonable modifications identified by Ohio EPA that are necessary to achieve compliance with these Orders.
- e. Hydrology Monitoring: Water level data shall be collected in May and late August of each monitoring year. Ground water levels shall be measured in the absence of inundated conditions.
- f. Soils Monitoring: A minimum of one soil probe or test pit per acre of restored wetland shall be collected to describe the soil profile and hydric soil indicators. Indicate the soil map unit name (soil series and phase) and the taxonomic subgroup.
- g. Vegetation Monitoring: The location and name of each plant community type within the restored wetland area and buffer area shall be marked on a scaled drawing or scaled aerial photograph (base map) and named.
- h. A representative observation point shall be selected in each plant community type in each distinct restored wetland area. This shall be a point which best represents the characteristics of the entire plant community. The observation points shall be marked on the base map.
- i. The dominant plant species shall be visually determined in each vegetation layer of each community type, and the scientific names of these species shall be included in the report. Dominant species are those species which have the greatest relative basal area (woody overstory), greatest height (woody overstory), greatest percentage of aerial coverage (herbaceous understory), and/or greatest number of stems (woody vines).

- j. Vegetation IBI: Respondent shall assess the restored wetlands to obtain a Vegetation IBI score according to methods approved by Ohio EPA at a minimum during the growing seasons annually after completion of construction of the restored wetlands.
 - k. Wetland Delineation: Respondent shall conduct delineation of the restored wetlands during the growing season annually during the monitoring period using the United States Army Corps of Engineers 1987 Wetland Delineation Manual (or successor document).
10. Respondent shall pay the amount of \$95,000.00 in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 6111 by an official check made payable to "Treasurer, State of Ohio". The official check shall be submitted to Carol Butler, or her successor, together with a letter identifying the Respondent, to:

Office of Fiscal Administration
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

A photocopy of the check shall be sent to Ohio EPA's Southeast District Office in accordance with Section X of these Orders.

11. In lieu of paying additional civil penalties, Respondent shall complete the following supplemental environmental projects (SEPs) in accordance with the timeframes specified below:
- A. Within 30 days of the effective date of these Orders, Respondent shall remit \$200,000.00 to the City of Cadiz to pay for sewer/wastewater infrastructure improvements within the City. Respondent shall ensure that the projects funded by this SEP do not directly benefit Respondent's physical facilities. Ancillary benefits by way of overall improvements in the system shall not be construed as a "direct benefit".
 - B. Within 30 days of the effective date of these Orders, Respondent shall remit \$25,000.00 to The Ohio State University to aid in developing a software driven planning tool for midstream infrastructure companies designed to avoid or minimize potential routes through environmentally sensitive areas.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's Division of Surface Water acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is defined in OAC Rule 3745-33-03(F).

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to activities occurring on or at the site.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio Environmental Protection Agency
Division of Surface Water, 401 Unit
50 West Town Street, Suite 500
Columbus, Ohio 43216
Attn: Enforcement Supervisor

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XI of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative or a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency



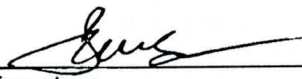
Craig W. Butler, Director

NOV 20 2014

Date

IT IS SO AGREED:

MarkWest Utica EMG, LLC



Signature

Frank M. Semple
Chairman, President & CEO

10/22/14

Date

Printed or Typed Name and Title