



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

June 12, 2018

Lorain County II Landfill, LLC  
43502 Oberlin-Elyria Road  
Oberlin, OH 44074

**Re: Lorain County II Landfill, LLC  
Permit - Long Term  
Approval  
Municipal Solid Waste Landfills  
Lorain County  
MSWL018801**

**Re: Lorain County II Landfill, LLC  
Permit - Long Term  
Variance  
Municipal Solid Waste Landfill  
Lorain County  
MSWL018801**

**Subject: Final Permit to Install Application for Lorain County Landfill II**

Dear Madam or Sir:

The Ohio Environmental Protection Agency, pursuant to Ohio Administrative Code Rule 3745-27-02 and the rules adopted thereunder, has reviewed the application for a permit with accompanying detail plans, specifications and/or information (hereinafter referred to as "application") regarding the above-referenced facility. This application has been approved by the Director subject to the conditions of compliance contained in the permit approval enclosed herewith and with all applicable laws, rules and standards. All construction must be supervised by an engineer or expert qualified in such work. Because the permit approval contains conditions of compliance, I urge you to read it carefully. Also inclosed is a Response to Comments.

You are requested to submit within thirty (30) days of the date of issuance of this Permit to Install, the required permit fee balance of seventy nine thousand six hundred dollars (\$80,000.00 - \$400.00 application fee = \$79,600.00), plus a variance fee balance of fifteen dollars (15.00) payable to **Treasurer, State of Ohio**. Please send the required payment to:

Ohio Environmental Protection Agency  
Permit to Install Fee  
Dept L-2711  
Columbus, OH 43260-2711

Payment of the fee balance within 30 days is a requirement of ORC Sections 3745.11 (Q) and (V). Failure to timely submit the required permit fee will result in an assessment of late penalties.

You are hereby notified that this action of the Director of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
30 East Broad Street, 4th Floor  
Columbus, Ohio 43215

If you have any questions, please contact the Ohio EPA District Office to which you submitted your application.

Sincerely,



Gregory Nichols,  
Division of Materials and Waste Management

Enclosure

cc: Jeremy Carroll, DMWM, CO  
Scott Hester, DMWM, CO  
Darla Peelle, PIC  
Lynn Sowers, DMWM, NEDO  
Stephen Bopple, DMWM, NEDO  
Applicable Health District

# OHIO ENVIRONMENTAL PROTECTION AGENCY

## PERMIT TO INSTALL

---

Application Number: 931342  
Application Received: April 30, 2013  
Permit Fee: \$80,000.00  
Permit Fee Balance: \$79,600.00  
Variance Fee: \$15.00  
Variance Fee Balance: \$15.00

Applicant: Lorain County II Landfill, LLC  
Address: 43502 Oberlin-Elyria Road  
City, State, Zip: Oberlin, OH 44074

Facility: Lorain County II Landfill

Location: 43502 Oberlin-Elyria Road  
Oberlin, OH 44074

Permit: Vertical Expansion

Issuance Date: JUNE 12, 2018

Effective Date: JUNE 12, 2018

Ohio EPA JUN 12 '18  
Entered Directors Journal

The above-named entity is hereby issued a permit-to-install (permit) for the above-described source pursuant to Ohio Administrative Code (OAC) Rule 3745-27-02. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the plans, specifications, and/or information accompanying the permit application, the above-described source of environmental pollutants will operate in compliance with applicable state and federal laws, rules, and regulations, and does not constitute expressed or implied assurances that, if constructed and/or modified in accordance with those plans, specifications, and/or information accompanying the permit application, the above-described source of environmental pollutants will be granted the necessary operating permits and/or licenses. This permit is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

Ohio Environmental Protection Agency

  
\_\_\_\_\_  
Craig W. Butler, Director

## **PERMIT SUMMARY**

This permit-to-install (PTI Number 931342) authorizes a vertical expansion at Lorain County II Landfill (Facility), an existing municipal solid waste landfill located at 43502 Oberlin-Elyria Road, Oberlin, Ohio 44074 in Lorain County. Lorain County II Landfill, LLC, Inc. is the operator, landowner, and the PTI applicant.

The vertical expansion will increase the permitted airspace by 9,513,530 cubic yards to a total of 61,148,650 cubic yards. The life of the facility is calculated to be 11.1 years at the authorized maximum daily waste receipt (AMDWR) of 6,500 tons and 18.6 years at the anticipated average daily waste receipt of 4,000 tons.

The existing facility and the proposed expansion are designed/constructed with a composite liner system (recompacted clay, geosynthetic clay liner, geomembrane liner), a leachate collection system, a surface water management system, a ground water monitoring system, an explosive gas monitoring system, an explosive gas extraction system, and a composite final closure cap system. The permit incorporates 30 years of post-closure care and financial assurance for closure and post-closure care.

Leachate is currently collected by the composite liner/leachate collection system which directs leachate to sumps. Leachate is then pumped through forcemains to leachate holding tanks. Leachate is then hauled offsite to three municipal wastewater treatment plants.

An active gas extraction system exists at the Facility. The system actively draws landfill gas which is incinerated or used for electricity production. The active gas collection system meets New Source Performance Standards (NSPS) requirements.

This permit grants two variances, from Ohio Administrative Code (OAC) Rule 3745-27-07(H)(2)(e) which requires that the isolation distance between the uppermost aquifer system and the bottom of the recompacted soil liner of a sanitary landfill is not less than fifteen feet, and from OAC 3745-27-08(C)(1)(c) which requires that the composite liner system have a slope of at least 2.0 percent after settlement.

This summary is provided solely for informational purposes and does not constitute a part of, or otherwise affect, the attached permit.

## **PERMIT CONDITIONS**

1. The Director of the Ohio Environmental Protection Agency (Ohio EPA), or an authorized representative, may enter upon the premises of the above-named applicant (permittee) at any reasonable time during construction and operation for the purpose of making inspections, conducting tests, or examining records or reports pertaining to the construction, modification, or installation of the above-

described source of environmental pollutants (municipal solid waste disposal facility).

2. The Facility shall be constructed in strict accordance with the plans, specifications, and information submitted to Ohio EPA which constitute this permit. There shall be no deviation from the approved permit or permit conditions without the express, written approval of Ohio EPA. Any deviation from the approved permit or the permit conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the Facility will operate in compliance with all Ohio laws and regulations. Additional landfill components shall be installed upon orders of Ohio EPA if the Facility is inadequate or cannot meet applicable standards.
3. Issuance of this permit does not relieve the permittee of the duty to comply with all applicable federal, state, and local laws, ordinances, and regulations.
4. This permit shall apply only to those facilities shown on the plans, specifications, and information submitted as part of PTI Application Number 931342, received April 30, 2013, and revised through September 20, 2017.
5. This permit may be modified, or alternatively revoked and reissued, to comply with any revisions to OAC Chapter 3745-27 applicable to this municipal solid waste disposal facility.
6. The permittee shall provide for the proper maintenance and operation of the Facility in accordance with the provisions of OAC Chapter 3745-27.
7. Nothing in this permit shall be construed to authorize any waiver from the requirements of any applicable federal or state laws or regulations except as specified herein. This permit shall not be interpreted to release the permittee from responsibility under Ohio Revised Code (ORC) Chapters 3704, 3714, 3734, or 6111; under the Federal Clean Water Act, the Resource Conservation and Recovery Act, or the Comprehensive Environmental Response, Compensation, and Liability Act; or from other applicable requirements for remedying conditions resulting from any release of contaminants to the environment.
8. This permit does not authorize the acceptance of any hazardous or infectious wastes, except those excluded from hazardous waste or infectious waste regulation by ORC Chapter 3734.
9. This permit does not authorize the acceptance of any asbestos or asbestos-containing waste material that is subject to the provisions of NESHAP, 40 CFR Part 61, Subpart M. No such asbestos or asbestos-containing waste material may be accepted without the necessary permits from Ohio EPA.

10. The permittee shall provide for the following inspections and facility maintenance:
  - a. The permittee shall provide for daily inspection of the Facility and completion of the Municipal Solid Waste Landfill Daily Log of Operations, Form 3. Written results of the inspections, including any corrective actions taken, shall be made available to Ohio EPA or the Lorain County General Health District upon request.
  - b. Surface water control structures, including, sedimentation ponds, sedimentation pond discharge structures, constructed wetlands, ditches, and culverts, shall be inspected at least weekly for erosion, clogging, or failure and prompt corrective action shall be taken if necessary. Written results of the inspections, including a discussion of any corrective actions taken, any water quality samples taken, and the date and weather conditions, shall be recorded on the Municipal Solid Waste Landfill Daily Log of Operations, Form 4. The information shall be maintained on site and submitted to Ohio EPA, DMWM, NEDO and the Lorain County General Health District, upon request.
  - c. To ensure proper operation of the sedimentation pond(s), the pond(s) shall be cleaned out as necessary when the volume of the settled particles necessitates cleaning based on inspection results or to maintain the storage volume required by OAC Rule 3745-27-08(D)(3).
11. The permittee shall fund a new financial assurance instrument or increase the amount listed on the existing financial assurance instrument in accordance with OAC Rules 3745-27-15, 3745-27-16, and 3745-27-17 for the current cost estimates of the facility, including the costs for the newly authorized disposal area. Funding shall be completed prior to waste acceptance in any disposal area newly authorized by this permit to install.
12. The Facility's AMDWR is established to be six thousand five hundred (6,500) tons. The permittee shall not accept more than 6,500 tons of solid waste for disposal at the Facility on any calendar day. This limit supersedes any previously established AMDWR for the Facility.
13. The permittee shall comply with the requirements of all previously issued authorizing documents for the Facility, except to the extent that this permit specifies requirements different from, or in addition to, the requirements of those previously issued authorizing documents. This permit, and the conditions herein, shall take precedence over any conflicting requirements.

**END OF PERMIT CONDITIONS**

## **VARIANCES**

Pursuant to ORC Section 3734.02(A) and OAC Rule 3745-27-03(C), the director may grant a variance if the applicant demonstrates to the director's satisfaction that construction, operation, closure activities, and/or post-closure activities of the solid waste facility in the manner approved by the variance and any terms and conditions imposed as part of the variance will not create a nuisance or a hazard to public health or safety or the environment and is unlikely to result in a violation of any other requirements of ORC Chapters 3704, 3714, 3734, and 6111 and any rules adopted thereunder.

### **Variance from OAC Rule 3745-27-07(H)(2)(e)**

OAC Rule 3745-27-07(H)(2)(e) requires that the isolation distance between the uppermost aquifer system and the bottom of the recompacted soil liner of a sanitary landfill facility is not less than fifteen feet of in-situ or added geologic material constructed in accordance with OAC Rule 3745-27-08.

The applicant has requested a variance from the requirement to have at least fifteen feet of isolation distance between the uppermost aquifer system and the bottom of the recompacted soil liner of the sanitary landfill for 1.22 acres of the landfill. The isolation distance proposed in the 1.22 acres varies between seven and fifteen feet. The applicant has conducted extensive hydrogeologic site investigation and modeling at the Facility and has demonstrated that the low permeability in-situ materials overlying the uppermost aquifer system in the 1.22-acre area will provide adequate protection to the uppermost aquifer system.

Ohio EPA has reviewed the variance request and has determined that granting a variance from OAC Rule 3745-27-07(H)(2)(e) will not create a nuisance or a hazard to public health or safety or the environment and is unlikely to result in a violation of any other requirements of ORC Chapters 3704, 3714, 3734, and 6111 and any rules adopted thereunder. Therefore, pursuant to ORC Section 3734.02(A) and OAC Rule 3745-27-03(C), the permittee is hereby granted a variance from OAC Rule 3745-27-07(H)(2)(e) for the 1.22-acre area subject of the variance request. This variance shall remain in effect throughout the effective period of this permit unless otherwise revoked.

### **Variance from OAC Rule 3745-27-08(C)(1)(c)**

The permittee has requested a variance from OAC Rule 3745-27-08(C)(1)(c), which states, in part:

“The composite liner system shall be designed to do the following:

For existing facilities where an owner or operator proposes to vertically expand over a composite liner system that was constructed after December 31, 2003, the slope of the

existing composite liner system located beneath the vertical expansion shall meet the design standard in paragraph (C)(1)(b) of this rule.”

OAC Rule 3745-27-08(C)(1)(b) states, in part:

“...(T)he composite liner system shall have at least a 2.0 percent slope in all areas, except along flow lines augmented by leachate collection pipes, after accounting for one hundred percent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the facility...”

The applicant has requested a variance, for a 15.7-acre area built after December 31, 2003, from the requirement to have at least 2.0 percent slope in all areas after accounting for 100 percent of primary and secondary settlement, except along flow lines augmented by leachate collection pipes. After accounting for the additional waste in this area, Cell A-EAST, the final determined slope, at the shallowest point, is 1.9 percent after primary and secondary settlement. The applicant has shown that this area will maintain a positive slope and that the leachate head will be maintained below the twelve inches of head requirement, even under the worst-case scenario (assuming the area has settled to 100 percent of primary and secondary settlement).

Ohio EPA has reviewed the variance request and has determined that granting a variance from OAC Rule 3745-27-08(C)(1)(c) will not create a nuisance or a hazard to public health or safety or the environment and is unlikely to result in a violation of any other requirements of ORC Chapters 3704, 3714, 3734, and 6111 and any rules adopted thereunder. Therefore, pursuant to ORC Section 3734.02(A) and OAC Rule 3745-27-03(C), the permittee is hereby granted a variance from OAC Rule 3745-27-08(C)(1)(c) for the 15.7-acre area subject of the variance request. This variance shall remain in effect throughout the effective period of this permit unless otherwise revoked.

**END OF VARIANCES**





## Division of Materials and Waste Management Response to Comments

**Project: Lorain County II Landfill, Permit-to-Install – Vertical Expansion**

### Agency Contacts

Stephen Bopple, Division of Materials and Waste Management  
(330) 963-1199, [stephen.bopple@epa.ohio.gov](mailto:stephen.bopple@epa.ohio.gov)

Darla Peelle, Public Interest Center  
(614) 644-2160, [darla.peelle@epa.ohio.gov](mailto:darla.peelle@epa.ohio.gov)

Ohio EPA held a public hearing on February 22, 2018, concerning a draft permit-to-install (PTI) issued to Republic Services for a vertical expansion of the Lorain County II Landfill located at 43502 Oberlin-Elyria Road, Oberlin, Lorain County. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on March 1, 2018.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

**Comment 1:**            **A commenter raised concerns that their well water was negatively impacted by the construction of waste cell D3 in December 2016.**

**Response 1:**        Ohio EPA has no evidence to suggest any impacts from the landfill to the ground water well in question. Ground water flow maps have consistently shown the direction of ground water flow along the northern perimeter of the landfill to be inward and southerly toward the landfill in all three zones. This is away from the commenter's well, not toward it. In addition, no ground water wells along the northern boundary of the landfill facility have shown, or are showing, any impact or release from the landfill. This includes six wells that monitor three separate ground water zones along the northern perimeter of

the landfill. These wells are monitored twice a year for up to 78 constituents

If there are concerns regarding a private water supply well, the owner may contact Lorain County Public Health (LCPH) at (440) 322-6367.

**Comment 2:**      **A commenter, speaking in support of Comment 1, asked the distance between core borings and the location of the well described by the commenter.**

**Response 2:**      The location of the water well in question is approximately 1.3 miles north-northeast of the landfill.

**Comment 3:**      **A commenter asked if the existing leachate collection system would be able to handle the extra load from a vertical expansion, or if the local ground water would be impacted.**

**Response 3:**      Ohio Administrative Code (OAC) Rule 3745-27-08 requires that, where an owner or operator proposes to vertically expand a landfill, the owner or operator must demonstrate that the existing liner system located beneath the vertical expansion area maintains positive drainage in the leachate collection system and has no more than one foot of head of leachate after accounting for consolidation of the compressible materials beneath the facility.

The owner will monitor the depth of leachate at each waste cell leachate sump to ensure that there is no more than one foot of head at the lowest point within each cell. The owner also performed engineering calculations to ensure that the added load from additional waste would not damage the existing leachate collection system.

The vertical expansion is limited to those existing areas of the landfill that have a best available technology (BAT) liner system to prevent possible contamination of underlying ground water.

**Comment 4:**      **A commenter questioned the amount of property taxes the landfill is currently paying, indicating that the amount being paid annually is low when considering the size of the property.**

**Response 4:** By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Property taxation falls under the purview of local authorities, which in this case is the Lorain County Auditor's office, which can be contacted at (440) 329-5207 for further information.

**Comment 5:** **A commenter questioned how the PTI vertical expansion will affect odors coming from the landfill.**

**Response 5:** The owner/operator is required by the permit and the solid waste regulations to minimize and control nuisance odors. Some of the specific activities required to address odor generation include covering the waste at the end of each day and operation of a gas collection and control system (GCCS). The GCCS follows the federal New Source Performance Standards (NSPS) air pollution rules. If citizens do encounter odors that they believe may be coming from the landfill, these odor concerns can be reported to Ohio EPA's regulatory partner, LCPH at (440) 322-6367. LCGHD maintains a log of odor complaints and results of odor investigations. LCPH also conducts regular odor surveillance around the landfill and at specific locations where complaints have been reported.

Ohio EPA staff have conducted odor surveillance in the past. When surveillance determined that odors were a nuisance, Notices of Violation and Findings and Orders have been issued. The owner/operator is in the process of implementing remedial corrective measures to eliminate nuisance odors and control landfill gases.

Landfill gas is collected in the system and sent to an adjacent facility where it is burned to produce electricity. Limits on methane emissions and other air pollutants are included in the facility's air permit issued through Ohio EPA's Division of Air Pollution Control. Questions regarding the air permit may be directed to: Marisa Toppi, Ohio EPA, Division of Air Pollution Control at (330) 963-1160 or at [marisa.toppi@epa.ohio.gov](mailto:marisa.toppi@epa.ohio.gov).

**Comment 6:** **A commenter questioned how the PTI vertical expansion will affect the slope stability of the landfill.**

**Response 6:** Ohio's landfill regulations require the owner or operator to demonstrate that the design for any engineered component, or system of components, meets the specific slope stability factors of safety that are defined within the rule. Ohio EPA has

reviewed the applicant's design and determined that it meets the applicable standards.

**Comment 7:**           **Commenters asked what chemicals are in the landfill odors.**

**Response 7:**       Most landfill odors come from newly placed waste at the working face. The majority of landfill gas is composed of methane and carbon dioxide. When gas generation reaches steady state conditions, landfill gas consists of approximately 40 percent by volume carbon dioxide, 55 percent methane, 5 percent nitrogen (and other gases) and trace amounts of non-methane organic compounds.

**Comment 8:**           **Commenters asked if they have a vote in whether the landfill PTI vertical expansion is granted by the Director.**

**Response 8:**       The process for approving or denying a permit-to-install request does not include a vote by the public. Comments and questions received through public hearings are reviewed by the Director as part of the process in determining whether to grant or deny a permit-to-install. The permit must meet all laws and regulations set forth in the Ohio Revised Code (ORC) and OAC.

**Comment 9:**           **A commenter expressed concern regarding the variance for 15 feet of separation between the bottom of the landfill liner and the uppermost aquifer system (UAS).**

**Response 9:**       The variance became necessary for a small area (less than two acres) identified during the permit review beneath the southern, older part of the landfill that did not fully meet the 15-foot isolation requirement. This small area has between seven and 15 feet of isolation distance and a BAT liner system is in place. The location of this area is in the west central part of the landfill. This side of the landfill is monitored by 14 wells that monitor three separate ground water zones. None of these wells have shown, or are showing, any impact or release from the landfill to ground water. The facility owner controls ground water beneath the site by operating underdrains. This has the dual effect of reducing seepage and uplift pressures on the landfill, as well as creating an inward gradient, causing ground water to flow towards the landfill, reducing or minimizing pathways of migration away from the landfill via ground water.

**Comment 10:** A commenter wanted to know what government organization is responsible for inspecting the landfill and ensuring it operates in accordance with Ohio rules and laws.

**Response 10:** The LCGHD is authorized by Ohio EPA's Director to implement the state's solid waste rules. LCGHD performs regular compliance inspections of the facility to ensure operations are in accordance with state rules and laws. LCGHD is authorized by Ohio EPA to issue Notice of Violation (NOV) letters and pursue enforcement actions when warranted. If necessary, Ohio EPA can also assist in or conduct inspections, assist LCGHD in enforcement action, or pursue enforcement action independently.

**Comment 11:** A commenter expressed concern regarding the frequency of ground water monitoring at the landfill and whether it was sufficient to protect public health.

**Response 11:** The landfill is ringed with a network of 31 monitoring wells that monitor three separate ground water zones that are sampled twice a year for up to 78 constituents. This data is subject to rigorous evaluation in both its raw form and through statistical analysis to determine if an impact or release from the landfill has occurred. Linear ground water flow velocities also have been calculated for each monitored zone. According to these calculations, ground water is traveling between approximately six and 15 feet per year near the landfill. As such, the current monitoring network, combined with semiannual sampling, is more than sufficient to protect public health.

**Comment 12:** A commenter questioned why the landfill is requesting the two variances.

**Response 12:** Please see our response to Comment 9 regarding the first variance.

The second variance pertains to an area of a waste cell liner system that, when originally constructed, met the 2 percent slope requirement. Over time, differential settling has occurred, and a portion of the liner system now has a 1.9 percent slope. The liner system is very close to the standard and it has been determined that it will maintain positive drainage and meet the requirement limiting the depth of leachate allowed at the bottom of the landfill cell to one foot.

**Comment 13:** A commenter wanted to know if water wells on property that the landfill has purchased have been properly abandoned in accordance with Ohio EPA and ODNR rules, specifically, wells for the Carlisle Drive-in, a farm next door to the landfill and Hilltop Farms on Butternut Ridge.

**Response 13:** After a search of publicly available information, no water supply well drilling logs or well abandonment records could be located for any of the properties in question. As these properties are now owned by the facility owner, Ohio EPA's Division of Drinking and Ground Waters (DDAGW) contacted the facility owner to determine if there was additional information regarding wells on these properties. The facility owner indicated that these properties are all vacant and any homes or structures are set to be torn down. The facility owner also conducted site walkovers on April 10 and April 11, 2018 to look for evidence of water supply wells or abandoned wells. The Hilltop Farms property does have a dug well in the basement. The farm next door to the landfill entrance also has a well as evidenced by the jet pump and water supply line coming into the basement. The well appears to be buried outside the home. The facility owner is aware that these wells must be properly sealed and abandoned before any demolition of the former structures takes place. No water supply well was encountered or discovered at the former Carlisle Drive-in.

**Comment 14:** A commenter wanted to know if previous verified complaints were taken into consideration by Ohio EPA with regard to the approval of the proposed PTI.

**Response 14:** The previous verified complaints have been addressed through the separate action of issuing Findings and Orders to correct odor problems at the facility. Currently, the owner/operator is complying with the issued Orders and considered to be in substantial compliance with rules and regulations. Therefore, the Director can approve the PTI.

**Comment 15:** A commenter complained about litter and dust from garbage trucks after they leave the landfill, and wanted to know what government organization was in control of the roads around the landfill and who is responsible for ensuring the garbage trucks do not leave litter.

- Response 15:** These concerns would be best addressed locally through the township and/or law enforcement.
- Comment 16:** **A commenter wanted to know if storm water runoff from the landfill is stored on site so sediment can settle out, or if the runoff is discharged immediately to adjacent properties.**
- Response 16:** Storm water runoff from the landfill is collected and diverted to six onsite ponds where settling occurs before discharge to Squires Ditch or Plum Creek. Effluent from the ponds must meet standards contained in the landfill's National Pollutant Discharge Elimination System (NPDES) permit, issued by Ohio EPA's Division of Surface Water (DSW). The ponds are sampled and inspected on a regular basis, in accordance with the requirements of the NPDES permit, and with inspection reports and test results submitted to Ohio EPA for review.
- Comment 17:** **A commenter, whose property is east of the landfill, complained of landfill odors and trash blowing off landfill property. The commenter asked if Ohio EPA would host a public hearing for residents.**
- Response 17:** If citizens do encounter odors or blowing trash that they believe may be coming from the landfill, these concerns can be reported to Ohio EPA's regulatory partner, LCPH at (440) 322-6367. Ohio EPA held a public hearing for this PTI on February 22, 2018.
- Comment 18:** **Emailed comment dated February 26, 2018: A commenter expressed concern about the landfill contaminating well water and the threat posed to drinking water for both people and animals by granting the variance to the 15 feet of isolation distance requirement.**
- Response 18:** Please see the response to Comment 12 regarding the first variance.
- Comment 19:** **Emailed comment dated February 28, 2018: A commenter submitted photos of property adjacent to the landfill showing ponded water that the commenter contends is uncontrolled water runoff into their fields or ground water.**
- Response 19:** These two photos were taken off the southwest corner of the landfill looking east and northeast. The photos were taken

with the photographer standing on the adjacent property. While it is true that the standing water is runoff, it is runoff that has come from the adjacent property owner's fields. The western and southwestern perimeter of the landfill is separated from this property by a constructed drainage swale that collects the runoff from the western slopes of the landfill and directs it to the south where it is managed by the sedimentation pond stretching along the southern boundary of the landfill. These photos were taken from a vantage point (blocked by trees) that does not allow the viewer to see the drainage structure that exists between the landfill and this adjacent property. Furthermore, topographic maps show that the field to the west of the landfill is slightly elevated or mounded and drainage from the eastern part of this field is toward the landfill.

**Comment 20:**      **Emailed comment dated March 1, 2018: A commenter questioned how the landfill ended up less than 15 feet from the aquifer and whether the landfill ignored the rules. The commenter also questioned what process is in place to address ground water contamination/clean it up and to stop leachate from entering the aquifer.**

**Response 20:**      With each new PTI application, additional hydrogeologic information is gathered and submitted. Prior to submittal of this PTI application, the lower sand zone had been exclusively monitored as a significant zone of saturation because available hydrogeologic information indicated its yield was not sufficient for it to be considered the uppermost aquifer system.

However, based on information submitted as part of this PTI application, it became clear that a portion of the lower sand zone (the middle zone that is monitored beneath the site) that was previously considered a significant zone of saturation and not an aquifer yields at least three gallons per minute, the minimum yield to be considered an aquifer. Because the lower sand zone is shallower than the bedrock-till interface aquifer, the lower sand zone is therefore considered the uppermost aquifer system in this area. As a result, the facility no longer meets the minimum required isolation distance of 15 feet in a 1.22-acre portion of the 279-acre approved disposal area. Therefore, it became necessary for the facility owner to request the variance in this permit application.

OAC Rule 3745-27-10(E) contains detailed ground water monitoring requirements for addressing any potential release



or impact to ground water quality. This section of the rules is called the ground water quality assessment monitoring program and requires the facility owner to monitor ground water quality for an additional list of 135 potential contaminants at the affected wells. This section requires the facility owner to fully define the rate, extent of migration, and concentration of the ground water impact or release. Once this has been completed, the facility owner may move into either compliance monitoring, if the release consists only of non-hazardous constituents, or corrective measures under OAC Rule 3745-27-10(F). Corrective measures require the facility owner to evaluate multiple remedies for addressing the contamination. Ultimately, the Director selects the best remedy for addressing the contamination, considering the protection of public health, safety, and the environment.

Comment 21 was submitted by the applicant for the permit-to-install:

**Comment 21:**       **Emailed comment dated February 26, 2018: A commenter pointed out that Ohio EPA rules now allow two years to establish background ground water quality, instead of one.**

**Response 21:**       The commenter is correct. OAC Rule 3745-27-10(D)(5) allows a two-year time frame to completely establish background statistical data for ground water monitoring wells. Therefore, Condition #13 of the draft permit was not included in the final permit.

**END OF RESPONSE TO COMMENTS**