

January 11, 2018

Lorain County Landfill II 43502 Oberlin-Eylria Rd. Oberlin, OH 44074 Re: Lorain County Landfill II

Permit - Long Term

Draft for Public Comment

Municipal Solid Waste Landfills

Lorain County MSWL018801

Subject: Lorain County Landfill II, Lorain County Draft PTI Number: 931342

To Whom it may conern:

The application for a Permit to Install (PTI) with accompanying plans and specifications for the above referenced facility has been reviewed by the staff of the Ohio EPA. It is the recommendation of the staff that the Director issue a PTI since your proposal appears to comply with applicable Ohio solid waste rules.

Therefore, enclosed please find a Permit to Install which is being issued to you today in draft form pursuant to Ohio Revised Code Chapter 3734 and the rules adopted thereunder.

A public notice concerning the issuance of this draft Permit to Install will appear in the following newspapers: Amherst NewsTimes, Chronicle Telegram, Morning Journal, North Ridgeville Press, Oberlin NewsTribune, Press (Avon Lake), Wellington Enterprise. A public hearing will be held at 6:00 p.m. on February 22, 2018, at New Russia Township Lodge located at 46300 Butternut Ridge Road, Oberlin, Ohio 44074 in Lorain County. Written comments will be accepted for the Director's consideration until the close of business on DMarch 1, 2018. The application may be reviewed in accordance with Ohio EPA's file review procedures by contacting Ohio EPA Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087, Tel: (330) 963-1200.

Following the close of the public comment period, the Director may issue a final Permit to Install upon such terms and conditions as he finds necessary to ensure that the operation of your facility is in accordance with Ohio's solid waste rules.

Please be advised that the detailed plans which you had submitted with your application will be transmitted with the issuance of the final permit. If you have any questions concerning this draft Permit to Install, please contact the Ohio EPA Southeast District Office at the above address and telephone number.

Sincerely, Sun July

Greg Nichols, Adminstrative Processing Unit Division of Materials and Waste Management

Enclosure

ec: Megan Ujvari , DMWM, CO

Scott Hester, DMWM, CO Lynn Sowers, DMWM, NEDO Stephen Bopple, DMWM, NEDO

OHIO ENVIRONMENTAL PROTECTION AGENCY

DRAFT 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:

Effective Date:

The above-named entity is hereby issued a permit-to-install (permit) for the abovedescribed 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

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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 an 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-

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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 constitutes this permit. There shall be no deviation from the approved permit or permit conditions without the express, written approval of the 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 **per**mittee 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, as soon as possible, but not later than one year from the date of installation of all proposed and replacement monitoring wells, sample and statistically analyze the ground water analysis data from these wells in accordance with OAC Rules 3745-27-10(C) and (D).

- 14. During solidification operations, the permittee shall ensure that:
 - a. State solid waste fees are paid on the combined weight of the bulk liquid and solidification agent.
 - b. Liquid waste is received solely from pre-screened customers.
 - c. Current OAC Rule 3745-52-11 documentation is available for inspection by Ohio EPA. This information shall be updated, at a minimum, on a yearly basis.
 - d. Materials used as solidification agents are non-hazardous waste, compatible with the liquid waste, and can result in a mixture that meets the definition of "solid waste."
 - e. The solidification basin areas and solidification agent staging areas are bermed to control run-off and run-on.
 - f. Liquid which comes in contact with staged solidification agent is properly contained and managed as leachate.
 - g. Bulk liquids are not stored in the solidification basins. Bulk liquids should be mixed, removed, and disposed in the landfill the same business day.
 - h. Storage of solidification agents occurs near the solidification basins, that the staging is in compliance with all applicable rules and regulations, and that storage and staging do not create a nuisance.
 - i. The mixing basin be moved, or removed from the landfill, if the unit interferes with the landfill operation or phasing.
 - j. Each load removed from the basin after mixing meets the definition of "solid waste" as specified in OAC Rule 3745-27-01(S)(23). At a minimum, the permittee must visually inspect every mixed load. Any loads which release liquid must be re-mixed with additional solidification agent or be tested in accordance with method 9095 (paint filter liquids test) in SW-846.
 - k. A separate daily log is maintained, in addition to the standard daily log of operations required by OAC Rule 3745-27-19(E)(10), that lists the following information: date, the generator of liquid waste and solidification agent (if the agent meets the definition of a "solid waste"), description of the liquid wastes and solidification agents received, quantity of both the liquid waste and solidification agent used for each mix, and documentation to ensure compliance with paragraphs (I) and (m) of condition 14 of this permit.

- I. The operator shall not receive, accept, process, handle, manage, or dispose of technologically enhanced naturally occurring radioactive material (TENORM), as defined in OAC Rule 3701:1-43-01, associated with drilling operations without first obtaining representative analytical results to determine concentrations of radium-226 and radium-228 present in the material.
- m. The operator shall not accept for disposal any TENORM material if that material contains or is contaminated with radium-226 and radium-228, or any combination of radium-226 and radium-228, at concentrations greater than or equal to 5 picocuries per gram above natural background. For the purpose of this permit, natural background means 2 picocuries per gram.
- n. The operator shall not accept for disposal hazardous waste as defined in ORC Section 3734.01.
- o. The operator shall not accept for **disposal brine** as defined in ORC Section 1509.01.
- p. The operator shall not accept for disposal any bulk liquid wastes that increase the potential for a landfill fire.
- q. Compliance is maintained with this permit, including the information contained in the permit to operate moveable and stationary solidification basins, unless changes are otherwise authorized in writing by Ohio EPA.
- 15. 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

VARIANCE

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.

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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), 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:

"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..."

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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% 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% 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), 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

