



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

March 3, 2016

Lake County Commissioners  
105 Main Street  
P.O. Box 490  
Painesville, Ohio 44077

**Re: Lake County Solid Waste Facility  
Permit - Long Term  
Draft for Public Comment  
Municipal Solid Waste Landfills  
Lake County  
MSWL018755**

**Subject: Draft Permit to Install #02-22460 – Lake County Solid Waste Facility**

Dear Commissioners:

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: Lake County Tribune, and News-Herald. A public hearing will be held at 6:00 p.m. on Thursday, April 14, 2016, at the Lake County Department of Utilities Learning and Business Center, 1981 Blasé-Nemeth Road, Painesville, Ohio in Lake County.. Written comments will be accepted for the Director's consideration until the close of business on Thursday, April 22, 2016. 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 Northeast District Office at the above address and telephone number.

Sincerely,



Demitria Crumiell-Hagens, Administrative Professional II  
Division of Materials and Waste Management

Enclosure

cc: Brad Mitchell, DMWM, CO  
Scott Hester, DMWM, CO  
Clarissa Gereby, DMWM, NEDO  
Jarnal Singh, DMWM, NEDO  
Luara Kuns, Lake County General Health District

# OHIO ENVIRONMENTAL PROTECTION AGENCY

## PERMIT TO INSTALL

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Application Number: 02-22460  
Application Received: January 28, 2006  
Permit Fee: \$80,000.00  
Permit Fee Balance: \$79,600.00

Applicant: Lake County Commissioners  
Address: Lake County Administration Center  
105 Main Street, P.O. Box 490

City, State, Zip: Painesville, Ohio 44077-0490

Facility: Lake County Solid Waste Facility

Location: 2039 Blasé-Nemeth Road  
Painesville, Ohio 44077-0490

Permit: Vertical and Lateral Expansion

Issuance Date:

Effective Date:

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

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Craig Butler, Director

### PERMIT SUMMARY

This is a DRAFT permit-to-install (PTI Number 02-22460) which, if approved, authorizes vertical and lateral expansion of the approved limits of waste placement at Lake County Solid Waste Facility (Facility), an existing municipal solid waste landfill located at 2039 Blasé-Nemeth Road, Painesville, Ohio in Lake County. The Lake County Commissioners are the PTI Applicant and the owners. The operators are Winters & Lewis Excavating, Inc. along with Lake County Solid Waste facility personnel.

The total acreage within the limits of waste placement will increase by 8.2 acres, and the disposal capacity will increase by approximately 7,432,213 cubic yards to a total of 14,022,378 cubic yards. The anticipated life expectancy is 27.4 years at the authorized maximum daily waste receipt of 1,474 tons and 67.3 years at the anticipated average daily waste receipt of 600 tons.

Portions of the existing facility and all of 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 provides for 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. The leachate is then pumped through the forcemain line to an offsite treatment plant, Gary L. Kron Waste Water Treatment Plant (WWTP) in Mentor.

A gas extraction system exists for the Facility and is designed to draw the gas by extraction wells to be incinerated or used by offsite businesses. The landfill gas is collected by Granger and is conditioned before it is added to the gas line where it is used by off-site businesses. Granger does not have the equipment to generate electricity and sell it to the grid. The gas collection system has been updated in this permit to meet current requirements.

This permit grants Lake County a variance from OAC Rule 3745-27-08(C)(1)(c), which requires that any composite liner constructed after December 31, 2003, and located underneath the proposed expansion shall meet the design standard in OAC Rule 3745-27-08(C)(1)(b).

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 (Director), 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 the Ohio Environmental Protection Agency (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 the Facility shown on the plans, specifications, and information submitted as part of PTI Number 02-22460, received January 28, 2006, with subsequent revisions through January 8, 2016.
5. This permit may be modified, or alternatively revoked and reissued by the Director of Ohio EPA, 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. The permittee shall ensure that the proposed ground water monitoring wells are installed and sampling has been initiated prior to waste placement in each sequenced phase of the landfill as specified in Section 3.0, Ground Water Monitoring System.
8. 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 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.

9. 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.
10. 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 first obtaining the necessary permits from Ohio EPA.
11. Not later than seven (7) days prior to starting any construction authorized under this permit, the permittee shall submit to Ohio EPA, Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO) and Lake County General Health District written notification of the anticipated construction start date so that construction of the Facility can be routinely inspected by Ohio EPA, DMWM, NEDO and Lake County General Health District.
12. The permittee shall perform the following activities during construction and operation of the Facility in accordance with the cited provisions of OAC Chapter 3745-27 as follows:
  - a. The pre-construction tests required by OAC Rule 3745-27-08(D) shall be performed and the test results submitted to Ohio EPA, DMWM, NEDO not later than seven (7) days prior to the intended use of the materials in construction.
  - b. The pre-construction interface tests required by OAC Rule 3745-27-08(G) shall be performed and the test results submitted to Ohio EPA, DMWM, NEDO not later than seven (7) days prior to the use of each geosynthetic material authorized by this permit.
  - c. The construction certification report required by OAC Rule 3745-27-08(H) shall be submitted to Ohio EPA, DMWM, NEDO and the Lake County General Health District not later than forty-five (45) days prior to the anticipated date of waste receipt in any newly constructed areas. Pursuant to OAC Rule 3745-27-19(C)(1), the permittee shall not accept waste in a

phase until Ohio EPA, DMWM, NEDO provides written concurrence of the construction certification report for that phase.

13. 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 Lake County General Health District upon request.
  - b. The permittee shall provide for weekly inspection of surface water control structures, including sedimentation ponds, sedimentation pond discharge structures, constructed wetlands, ditches, and culverts and completion of the Municipal Solid Waste Landfill Daily Log of Operations, Form 4. Prompt corrective actions shall be taken if necessary. Written results of the inspections, including any corrective actions taken, shall be made available to Ohio EPA, DMWM, NEDO or Lake 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).
14. 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.

**END OF PERMIT CONDITIONS**

## VARIANCE

### ORC Section 3734.02(A) 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 requires that any composite liner constructed after December 31, 2003, and located underneath the proposed expansion, shall meet the design standard in OAC Rule 3745-27-08(C)(1)(b).

OAC Rule 3745-27-08(C)(1)(b) requires new facilities or lateral expansions of existing facilities to have a composite liner system with 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 which includes, as applicable, in-situ soil, added geologic material, structural fill material, and recompacted soil liner.

OAC Rule 3745-27-08(C)(1)(d) states: *"For existing facilities where an owner or operator proposes to vertically expand over a composite liner system that was constructed before December 31, 2003, the owner or operator shall demonstrate to the director that the existing composite liner system located beneath the vertical expansion maintains, at a minimum, positive drainage in the leachate collection system and has no more than one foot of head of leachate after accounting for the additional waste and one hundred percent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the facility..."* Therefore, although the 2.0 percent minimum slope requirement in OAC Rule 3745-27-08(C)(1)(c) will not be met in portions constructed after December 31, 2003, the criteria in OAC Rule 3745-27-08(C)(1)(d) to ensure adequate collection and management of leachate will be satisfied.

Unit C4 Phase 4 of the landfill was constructed in 2007 in accordance with PTI number 02-5646 at a minimum slope of 2 percent. An analysis was conducted and, after accounting for the additional waste of the proposed expansion and one hundred percent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the facility, the minimum bottom grade of Unit C4 Phase 4 was determined to be 1.67 percent. The analysis concluded positive drainage will be maintained after primary and secondary settlement have occurred and there will be less than one foot of leachate head maintained on the liner system.

Pursuant to ORC Section 3734.02(A) and OAC Rule 3745-27-03(C), the Director may grant a variance if he determines that construction, operation, closure activities, and/or post-closure activities in the manner approved by the variance and any terms or conditions imposed as part of the variance will not create a nuisance or hazard to public

health or safety or the environment and are unlikely to result in a violation of any other requirements of ORC Chapters 3704, 3714, and 6111 and rules adopted thereunder.

The grades of the portions of the composite lined cells contained in Unit C4 Phase 4 that fall below the minimum required slope of 2 percent will remain positive and the leachate collection and management system will limit leachate accumulation to less than twelve inches of head. Upon review of the variance request, I have determined that granting the variance will not create a nuisance or 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, and 6111 and rules adopted thereunder. Therefore, I hereby authorize a variance to allow the placement of waste over emplaced waste where the composite liner system will have a final slope of less than 2.0 percent in all areas of solid waste placement after accounting for one hundred percent of the primary consolidation settlement and the secondary consolidation settlement of the compressible materials beneath the facility. This variance shall remain in effect throughout the effective period of this permit unless otherwise revoked.