



## CERTIFIED

October 1, 2013

Duke Energy Ohio, Inc.  
139 E. Fourth Street, Room EM-740  
Cincinnati, OH 45202

**RE: DRAFT Permit to Install  
William H. Zimmer Residual Waste Landfill**

Dear Sir or Madam:

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 Clermont Sun newspaper. A public hearing will be held at 6:30 p.m. Wednesday, November 13, 2013, at the Moscow Community Center, 30 Wells Street, Moscow, Ohio 45153. Written comments will be accepted for the director's consideration until Friday, November 22, 2013. The application may be reviewed in accordance with Ohio EPA's file review procedures by contacting Ohio EPA Southwest District Office, 401 E. Fifth, Dayton, Ohio 45402, Tel: (937) 285-6357.

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.

Duke Energy Ohio, Inc.  
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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 Southwest District Office at the above address and telephone number.

Sincerely,



Georgia Frakes, Management Analyst  
Division of Materials and Waste Management

Enclosures: Draft Permit

cc: Brad Mitchell, DMWM, CO  
Scott Hester, DMWM, CO  
Darla Peelle, PIC  
Michelle Ackenhausen, DMWM, SWDO  
Mike Joseph, DMWM, SWDO  
Russ Brown, DMWM, SWDO  
Eric Ratliff, Clermont Co. Health Department

## **PUBLIC NOTICE**

**Clermont County**

### **ISSUANCE OF A DRAFT PERMIT TO INSTALL AND NOTICE OF PUBLIC HEARING**

Notice is hereby given that on October 1, 2013, the director of Ohio EPA issued a draft Permit to Install (PTI #813816) to Duke Energy Ohio, Inc., 139 E. Fourth Street, Room EM-740, Cincinnati, Ohio 45202 in Clermont County. The permit, if issued as a final permit, authorizes a lateral and vertical expansion at the William H. Zimmer Residual Solid Waste Landfill located near State Route 756 and Turkeyfoot Road in Moscow, Ohio 43506. A public hearing concerning this Permit will be held at 6:30 p.m. on Wednesday, November 13, 2013 at the Moscow Community Center, 30 Wells Street, Moscow Ohio 45153. All interested persons are entitled to attend or be represented and give written or oral comments on this project. Persons wishing to be on Ohio EPA's interested parties' mailing list for this project or submit written comments must do so before the close of business on November 22, 2013. Comments received after this date may not be considered as part of the official record of this hearing. Send all written comments to Ohio EPA, Division of Materials and Waste Management, Information Resources Management, P.O. Box .1049, Columbus, Ohio 43216-1049, Tel: (614) 644-2621. Copies of the pending Permit to Install may be reviewed at Ohio EPA Southwest District Office, 401 E. Fifth Street, Dayton, Ohio, Tel: (937) 285-6357 or Ohio EPA Central Office, Division of Materials and Waste Management, 50 W. Town Street, Suite 700, Columbus, Ohio 43215, Tel: (614) 644-2621.

**OHIO ENVIRONMENTAL PROTECTION AGENCY  
PERMIT TO INSTALL**

Application Number: 813816  
Application Received: June 20, 2011  
Permit Fee: \$80,000.00  
Permit Fee Balance: \$80,000.00 – \$400.00 = \$79,600.00

**DRAFT**

Applicant: Duke Energy Ohio, Inc.  
Address: 139 E. 4<sup>th</sup> Street  
Cincinnati, OH 45202

Facility: William H. Zimmer Residual Solid Waste Landfill

Location: The facility is located approximately 3.5 miles east of the Wm. H. Zimmer generating station near the intersection of State Route 756 and Fruit Ridge Road. Washington Township, Clermont County

PTI: 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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Scott J. Nally, Director

### **PERMIT SUMMARY**

This is a draft permit-to-install (PTI No. 813816) which, if issued as a final permit, authorizes a lateral and vertical expansion of the Wm. H. Zimmer Residual Solid Waste Landfill (Facility), an existing residual waste landfill in Clermont County. Duke Energy Ohio, Inc. (Duke) is the applicant for the permit-to-install.

The approved disposal area will increase by 89 acres to a total of 283 acres and the approved disposal capacity will increase by 19.1 million cubic yards to 41.1 million cubic yards. The anticipated life expectancy is 29 years based on the anticipated average daily waste receipt of 2,795 tons.

The Facility's design includes the following: a composite (recompacted soil and flexible membrane) liner system, a twin leachate collection pipe system, a surface water management system, a ground water monitoring system, and a final closure cap system. The permit also incorporates 15 years of post-closure care and financial assurance for closure and post-closure care.

This draft permit proposes to grant Duke one exemption from the following rule: OAC Rule 3745-30-14(K)(3) which requires annual inspections of the leachate collection pipes.

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 (residual 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 the permit conditions without the express written approval of Ohio EPA. Any deviation from the approved 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 submitted as part of PTI Application No. 813816 received on June 20, 2011, with subsequent revisions received on December 19, 2012; March 5, 2013; and May 21, 2013.
5. This permit approval may be modified, or alternatively revoked and reissued, to comply with any revisions to OAC Chapter 3745-30 applicable to this residual 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 3745-30.
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.
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.
10. Not later than seven (7) days prior to starting any construction authorized under this permit, the permittee shall submit to Ohio EPA, Southwest District Office (SWDO), Division of Materials and Waste Management (DMWM) and the Clermont County Health Department (CCHD) written notification of the anticipated construction start date so that construction of this Facility can be routinely inspected by Ohio EPA, SWDO, DMWM and the CCHD before the Facility is placed into operation.
11. The permittee shall provide for the following inspection and facility maintenance:
  - a. The permittee shall provide for daily inspection of the Facility and completion of the Daily Inspection Checklist and the Residual Solid Waste Disposal Facility log of Operations as specified in the PTI application. Written results of the inspections, including any corrective measures employed, shall be made available to Ohio EPA, SWDO and the CCHD.

- b. Surface water control structures, including sedimentation basins, sedimentation basin discharge structures, pipes, ditches and culverts, shall be inspected weekly for erosion, clogging or failure and prompt corrective action shall be taken if necessary. A log documenting inspection results, any corrective actions taken, any water quality samples taken, and the date and weather conditions during any water quality sampling shall be maintained and submitted to Ohio EPA, SWDO or the CCHD, upon request.
    - c. To ensure proper operation of sedimentation basin(s), the basin(s) shall be cleaned out as specified in PTI No. 813816 or when the volume of the settled particles necessitates cleaning based either on inspection results or to maintain the storage volume required by OAC Rule 3745-30-07(C)(4)(d).
- 12. The permittee shall perform the following activities during construction and operation of the Facility in accordance with the cited provisions of OAC Chapter 3745-30 as follows:
  - a. The pre-construction tests required by OAC Rule 3745-30-07(F) shall be performed, and the test results shall be submitted to Ohio EPA, SWDO not later than seven (7) days prior to the intended use of the materials in construction.
  - b. The pre-construction tests required by OAC Rule 3745-30-07(D) shall be performed, and the test results shall be submitted to Ohio EPA, DMWM, SWDO not later than seven days prior to the intended use of the material in construction.
  - c. The construction certification report required by OAC Rule 3745-30-07(B) shall be submitted to Ohio EPA, DMWM, SWDO and CCHD not later than forty-five days prior to the anticipated date of waste receipt in newly constructed areas. The permittee shall not accept waste in a sequence until Ohio EPA, DMWM, SWDO provides written concurrence of the construction certification report for that sequence.
- 13. The permittee shall not conduct leachate recirculation at the residual solid waste landfill without prior written approval from Ohio EPA.
- 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.

15. The permittee shall continue to comply with all existing applicable authorizing actions for the Facility. However, the design, construction, operation, closure, and post-closure activities authorized by this permit (PTI No. 813816) as set forth in the plans, specifications and information submitted in the application for this permit and the conditions set forth in this permit, shall take precedence over any conflicting plans, specifications, information, or conditions.

### **END OF PERMIT CONDITIONS**

### **EXEMPTION**

Pursuant to ORC Section 3734.02(G) and OAC Rule 3745-27-03(B), the Director may, by order, exempt any person generating, collecting, storing, treating, disposing of, or transporting solid wastes, or processing solid wastes that consist of scrap tires, in such quantities or under such circumstances that, in the determination of the director, are unlikely to adversely affect the public health or safety or the environment from any requirement to obtain a registration certificate, permit, or license or comply with other requirements of ORC Chapter 3734.

#### **Exemption from OAC Rule 3745-30-14(K)(3)**

The permittee has requested an exemption from OAC Rule 3745-30-14(K)(3), which requires annual inspections of the leachate collection pipes.

The leachate pipe system will be inspected at the time of installation in accordance with the QA/QC Plan and the Operational Information included in the PTI application.

The analysis included in the PTI application's Exemption Request demonstrates that the drainage layer would function adequately even without collection pipes. As an added measure of redundancy, all leachate collection pipes will be constructed, in duplicate, as was completed during the construction of Sequences 1, 2, and 3.

#### **Exemption from OAC Rule 3745-30-07(C)(2)(e)**

Duke also requested an exemption from OAC Rule 3745-30-07(C)(2)(e), which specifies that the flexible membrane liner shall be protected from the drainage layer by a cushion layer as required by the Director. The permit specifies that sand will be used as the drainage layer material. Because use of sand in the drainage layer will not result in stress concentrations on the flexible membrane liner, the Director has not required inclusion of a cushion layer. Therefore, the requested exemption is not necessary.