



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

CERTIFIED MAIL

February 24, 2014

Duke Energy Ohio, Inc.
Environmental Health and Safety Services
139 East Fourth Street, Room EM-740
Cincinnati, OH 45202

RE: Duke Energy Ohio, Inc. – Zimmer Landfill
Permit – Long Term Approval
Residual Solid Waste Landfill
Clermont County
RSWL018782

Dear Sir or Madam:

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.

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), 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

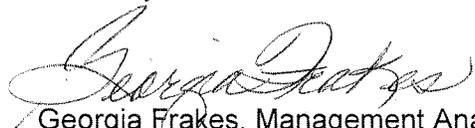
Payment of the \$79,600.00 fee within 30 days is a requirement of ORC Sections 3745.11 (Q) and (V). Failure to timely submit the required permit fee will result in an assessment of late penalties.

You are hereby notified that this action of the Director of Environmental Protection (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. It must be filed with the Appeals 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 at the following address:

Environmental Review Appeals Commission
77 South High Street
17th Floor
Columbus, Ohio 43215

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

Sincerely,



Georgia Frakes, Management Analyst
Division of Materials and Waste Management

Enclosures: Permit to Install and Invoice

cc: Brad Mitchell, CO, DMWM
Scott Hester, CO, DMWM
Darla Peelle, PIC
Fanny Hariton, DMWM, CO
Mike Joseph, DMWM, SWDO
Michelle Ackenhausen, DMWM, SWDO
Russ Brown, DMWM, SWDO
Clermont County Health Department

OHIO ENVIRONMENTAL PROTECTION AGENCY
PERMIT TO INSTALL

OHIO EPA
FEB 24 2014

ENTERED DIRECTOR'S JOURNAL

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

Applicant: Duke Energy Ohio, Inc.
Address: 139 E. 4th 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: February 24, 2014

Effective Date: February 24, 2014

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, Interim Director

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By:  Date: 2-24-14

PERMIT SUMMARY

This is a Final permit-to-install (PTI No. 813816) which 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 Final permit proposes to grant Duke one (1) 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 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 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 (7) 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 (45) 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.

Ohio EPA has reviewed the exemption request and has determined that granting an exemption from OAC Rule 3745-30-14(K)(3) is unlikely to adversely affect the public health or safety or the environment. Therefore, pursuant to ORC Section 3734.02(G), the permittee is hereby exempted from OAC Rule 3745-30-14(K)(3). This exemption shall remain in effect throughout the effective period of this permit unless otherwise revoked.

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.



**Division of Materials and Waste Management
Response to Comments**

Subject: Wm H. Zimmer Residual Solid Waste Landfill, Clermont County
Permit-to-Install (PTI No.813816): Lateral and Vertical Expansion

Re: Duke Energy Ohio, Inc – Zimmer Landfill; Permit - Long Term; Public
Response; Residual Solid Waste Landfills; Clermont County;
RSWL018782

Agency Contacts for this Project

Division Contacts: Mike Joseph
(937) 285-6047
mike.joseph@epa.ohio.gov

Public Involvement Coordinator: Darla Peelle
(614) 644-2160
darla.peelle@epa.ohio.gov

Ohio EPA held a public hearing on November 13, 2013, regarding a draft permit-to-install for the Duke Energy's Wm. H. Zimmer Residual Waste Landfill. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on November 22, 2013.

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.

All comments received are part of the official record and have received consideration by Ohio EPA in making a final decision on the issuance of this permit.

Comment 1: Two citizens voiced their concerns regarding the landfill's operations and the impact of dust and noise pollution on their community.

Response 1: Industrial emissions, such as dust, are regulated by Ohio EPA and are monitored by the Clermont County General Health District and Hamilton County Department of Environmental Services (HCDOES). Ohio EPA does not have the authority to consider noise issues with respect to the permit-to-install application. Inquiries about noise should be made to Duke Energy.

Dust is an air permit issue and inquiries should be made HCDOES, the Clermont County Health Department, and Duke Energy. The contacts for dust and noise complaints are:

Hamilton County Department of Environmental Services
Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, Ohio 45219
24-hour hotline: (513) 946-7777
Toll Free: (800) 889-0474

Eric Ratcliff, R.S.
Clermont County General Health District
2275 Bauer Rd.
Suite 300
Batavia, Ohio 45103
Phone: (513) 732-7499

Al Schmitt
Duke Energy
Corporate Environmental Services
139 E. 4th St.
Cincinnati, OH 45201
Phone: (513) 467-5206

End of Response to Comments

Ohio EPA Invoice/Receipt

Date Printed: February 24, 2014

Revenue ID: 973448

Please include this Revenue ID with all correspondence.

Place ID: 302583

Information: Zimmer LDFL Expansion - Level Two IWP
State Route 756 / Turkeyfoot Road
Moscow, OH 45153-

Due Date:

Amount Due:

Effective Date: February 24, 2014

Revenue Description: DSIWM- Permit to Install (Solid Waste)

Program Name: Solid Waste Programs

Reason: Permit Fee Balance

For some Revenues, Interest and/or Penalties may be charged for late payment.

Next Interest Date (if applicable):

Next Penalty Date (if applicable):

Remittance Advice

Detach Here - Please Return This Portion With Your Payment

Place ID: 302583

Information: Zimmer LDFL Expansion - Level Two IWP
State Route 756 / Turkeyfoot Road
Moscow, OH 45153-

Due Date:

Amount Due:

Secondary Type/Id: ALPLN / Zimmer Residual Wa

Revenue Type: PTISW

Amount Enclosed: \$

Please write this number on your check. Revenue ID: 973448

Make check or money order payable to "Treasurer, State of Ohio"

Remit to: Ohio Environmental Protection Agency - OFA
Department L-2711
Columbus, OH 43260-2711

For Ohio EPA use only

Check ID: _____
Check Date: _____
Check Number: _____
Check Amount: \$ _____