OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
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George V. Voinovich
Governor

Re: Permit to Install
Portage County
Application No: 16-1155
TOXIC REVIEW

CERTIFIED MAIL

September 21, 1994

BROWNING-FERRIS INDUSTRIES OF OHIO, INC.
MICHAEL T. HEHER
1043 ST RT 225
ATWATER, OH 44201

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 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 Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
AKRON AIR POLLUTION CONTROL
CHARLES RAMER

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OhioEPA

State of Ohio Environmental Protection Agency

Permit to Install
Terms and Conditions

Application No. 16-1155
APS Premise No. 1667010007
Permit Fee: $800.00

Name of Facility: BROWNING-FERRIS INDUSTRIES OF OHIO, INC.

Person to Contact: MICHAEL T. HEHER

Address: 1043 ST RT 225
ATWATER, OH 44201

Location of proposed source(s): 1043 ST RT 225
ATWATER, OHIO

Description of proposed source(s):
LANDFILL GAS COLLECTION SYSTEM WITH FLARE CONTROL SYSTEM.

Date of Issuance: September 21, 1994

Effective Date: September 21, 1994

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Donald R Schregardus

Director

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to

the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for BROWNING-FERRIS INDUSTRIES OF OHIO, INC. located in Portage County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P001	Landfill gas collection and control system	Enclosed flare operating with a 98% destruction of non-methane organics	3745-31-05 3745-18-06 3745-21-08	2.18 lbs/hr NMOC 5.92 lbs/hr NO_x 3.24 lbs/hr SO_2 29.61 lbs/hr CO 6.96 lbs/hr HCl 0.01 lb/hr Benzene 0.03 lb/hr Vinyl Chloride

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
NMOC	9.55
NOx	25.93
SO2	14.19
CO	129.69
HCl	30.50
Benzene	0.044
Vinyl Chloride	0.181

CONSTRUCTION STATUS

The Akron Air Pollution Control shall be notified in writing as to (a) the construction starting date, (b) the construction completion

date, and (c) the date the facilities were placed into operation for the following source: P001 - Flare Control System.

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.

B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

C. Tests shall be performed for the following source(s) and pollutants(s):

Source	Pollutants
P001	CO, HCl and NMOC using US EPA Method 25 and additional tests as required per the special terms and conditions.

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. Gas Collection System

Design, construction and siting of the gas extraction wells and collection system shall be in accordance with the CLD and Lewis (BFI of Ohio) PTI application, and standard industry methods and practices currently in use. In addition, the gas collection system shall:

a. Be designed to handle the maximum expected gas flow rate over the lifetime of the gas control or treatment system equipment from the entire area of the landfill that warrants control over the equipment lifetime.

b. Collect gas from each area of the landfill in which refuse has been placed for a period of 2 years or more when the adjacent gas monitoring probes indicate offsite migration.

c. Collect gas at a sufficient extraction rate.

2. Control System

The collected gas shall be routed to a control system designed and operated within the parameters demonstrated in the performance test to reduce NMOCs by 98 weight-percent, at maximum inlet concentration. The NMOC concentration shall be determined by Method 25.

Whenever the flare is in operation, a temperature of at least 1400 degrees F (or higher temperature needed to insure 98 weight-percent destruction of the NMOCs), measured by the temperature indicator, must be maintained.

All landfill gas collected shall be directed to the flare station.

3. Gauge Pressure Monitoring, Recording and Reporting

This facility shall install a sampling port at each well and measure and record the gauge pressure in the gas collection header on a monthly basis. These monthly records, as well as any supporting data, shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

A semi-annual gauge pressure report is to be submitted by this facility to the Ohio EPA field office. This report shall contain as a minimum, the date, time of occurrences, cause, explanation and action taken for any times when the gauge pressure of any well is positive.

This report shall be submitted by February 1, and August 1 of each year and shall address the data obtained during previous semi-annual period (July through December, and January through June, respectively).

4. Temperature Restrictions, Monitoring, Recording and Reporting

This facility shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature in the combustion device. This monitor shall have an accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5°C, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

These records, as well as any supporting data, shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

A semi-annual temperature report is to be submitted by this facility to the Ohio EPA field office. This report shall contain as a minimum, the date, time of occurrence, cause, explanation and action taken for any times when the temperature falls below the limit established during the performance test.

This report shall be submitted by February 1, and August 1 of each year and shall address the data obtained during previous semi-annual period (July through December, and January through June, respectively).

5. Gas Flow Monitoring, Recording and Recordkeeping

This facility shall operate and maintain a continuous gas flow monitor and recorder which measures and records the gas flow to the control device at least every 15 minutes. The gas flow monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

These records, as well as any supporting data, shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director for review during normal business hours.

A semi-annual gas flow report is to be submitted by this facility to the Ohio EPA field office. This report shall contain as a minimum, the date, time of occurrence, cause, explanation and action taken for any times when the gas stream is diverted from the control device or has no flow rate.

This report shall be submitted by February 1, and August 1 of each year and shall address the data obtained during previous semi-annual period (July through December, and January through June, respectively).

6. Nuisance, Fugitive Dust and Housekeeping

a. During construction, all working areas, construction spoils, and unpaved roadways shall be watered down to minimize dust.

b. The permit holder shall operate this facility in such a manner that it does not become offensive or objectionable to the public in violation of OAC Rule 3745-15-07. If an odor resulting from construction activities is detected at the property line, the permit holder and operator shall institute all available mitigation measures. Odor mitigation measures deemed appropriate by the Director to protect the comfort, repose, health or safety of the public shall be implemented upon request.

c. Any section of landfill material exposed during construction shall be covered as soon as possible once construction of that section is complete.

d. This facility shall not cause or allow any open burning at this location.

e. The owner or operator shall not initiate or allow any salvage operation to be conducted at this location without prior approval of the Ohio EPA. This excludes recycling or energy recovery, unless Ohio EPA approval is needed.

f. The equipment shall be properly maintained and kept in good operating condition at all times.

7. Additional Restrictions

a. The total quantity of landfill gas burned in the flare system shall not exceed 3.91 million cubic feet per day.

b. If the temperature monitor detects a no flame condition which cannot be immediately restarted, the system shall automatically shut down the flow of landfill gas.

c. Drawings of the landfill gas collection system, as built, shall be submitted to the Ohio EPA Northeast District Office within 90 days after construction is complete. The drawings shall include locations of wells and trenches, well depths, pipe lengths, diameters, condensate traps, layout of the system, and other relevant information.

d. The owner or operator of this facility shall not install any air contaminant source other than those named in this Permit to Install, including a landfill gas fired boiler or generator, without first obtaining a Permit to Install from the Ohio EPA.

e. The equipment shall be operated and maintained by personnel properly trained in its operation.

f. All recording devices shall be synchronized based on the time of day.

g. The skin temperature of the flare shroud within four feet of all the source test ports shall not exceed 250°F. If a heat shield is required to meet the requirement, its design shall be approved by the Ohio EPA prior to its construction. The heat shield, if required to meet the temperature requirement, shall be in place whenever a source test is conducted for the Ohio EPA.

h. Any breakdown or malfunction of the landfill gas flare resulting in the emission of raw landfill gas shall be reported to the Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emission to the atmosphere.

i. Mitigation measures which are deemed appropriate by the Ohio EPA as necessary to protect the comfort, repose, health, or safety of the public, shall be implemented upon request.

j. In the event of a potential emergency, such as a fire within the landfill, wells effected may be temporarily shut off, which could result in a negative gauge pressure. The Ohio EPA field office shall be notified within one working day of any shut downs of any wells.