

Facility ID: 0448031044 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Portable Soil Remediation Unit	OAC 3745-31-05 PTI No. 04-700	0.04 grain PE/dscf; 11.66 lb PE/hr; 5% Opacity; 8.33 lb VOC/hr; 99% Destruction of VOC for the thermal oxidizer.
	OAC rule 3745-21-07 3745-17-07, and 3745-17-11	less stringent than the limitation established pursuant to OAC rule 3745-31-05

2. Additional Terms and Conditions

- (a) Particulate matter emissions shall not exceed 0.04 gr/dscf. Emissions exiting the thermal oxidizer stack shall not exceed 5% opacity.
 The primary treatment unit (rotary kiln) shall operate at a minimum temperature of 400 degrees Fahrenheit and at a maximum temperature of 900 degrees Fahrenheit. The emissions from the rotary kiln shall be controlled by a baghouse and thermal oxidizer. The average temperature of the exhaust gases from the thermal incinerator, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 The primary chamber shall not be operated, unless the baghouse is operating and the thermal oxidizer is not more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 All emissions from the rotary kiln must pass through the fabric filter followed by the thermal oxidizer and remain in the thermal oxidizer chamber for a minimum of one (1) second at 1450 F before exiting the chamber.
 The thermal oxidizer shall have a minimum organic compound destruction efficiency of 99%.
 Fugitive dust from this process shall be controlled by use of covered conveyors and wet suppression at drop points out of the process. Visible emissions from the conveying, handling of soil and storage piles shall not exceed 10 percent opacity.
 Only clean burning fuel, such as natural gas or propane may be used in the main rotary kiln burner and the afterburner. A change in the fuel used will require a Permit to Install.
 If this unit is operated as a portable site, no permanent structure is needed. However, care shall be taken to prevent run-off and fugitive dust by using plastic for storing material and tarping as needed, and any other methods deemed necessary.
 Organic compounds excludes the compounds methane, ethane and propane.

B. Operational Restrictions

1. Contaminated Soil Restrictions
 Only soils and aggregate contaminated with the following virgin (non-recycled) petroleum products shall be treated in the process:
 - i. Gasoline
 - ii. Jet Fuel
 - iii. Motor Oil

- iv. No. 1 Fuel Oil
- v. No. 2 Fuel Oil
- vi. No. 4 Fuel Oil
- vii. No. 6 Fuel Oil

The total petroleum hydrocarbon concentration of the contaminated soil shall not exceed two (2) percent by weight during any one hour period, nor more than one half (0.5) percent by weight annually.

At no time shall more than two weeks worth of contaminated soil, based on the tested operating rate of this process, be stored on site.

The through-put of remediated soil shall not exceed 768 tons/day or 240,000 tons/year.

C. Monitoring and/or Record Keeping Requirements

1. **Thermal Incinerator Temperature Monitoring and Record keeping Requirements**
The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within 1 percent of the temperature being measured or 5 degrees Fahrenheit, 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.
Both the rotary kiln baghouse and thermal oxidizer shall be equipped with a device to continuously measure, display and record temperatures.
2. **Contaminated Soil Testing**
The permittee shall require soil samples from each clean-up site, to be taken, analyzed, and certified by an independent laboratory before the contaminated soil is transported and/or stored on site. The analysis shall include total volatile organic compound contamination (weight percent), and any heavy metal, halogenated organic compound or hazardous waste concentrations above normal soil background levels. Only soils contaminated with virgin petroleum products as described in term and condition number B(1.a) may be deposited on site.
The permittee shall obtain daily composite samples of the soil being remediated. The composite sample shall consist of, at a minimum, three combined subsamples collected from the soil to be remediated. The composite samples shall be analyzed by an independent laboratory using Test Method 8240 of SW-846. The results shall include the total volatile organic compound concentration (weight percent).
The permittee shall maintain hourly and annual records of the total petroleum hydrocarbon concentration of the soil remediated.
The permittee shall be capable of weighing or tracking both the amount of soil delivered or brought into the site on a daily basis and the amount of soil charged to the rotary kiln on an hourly basis. The permittee shall also maintain daily records of mass of contaminated soil present on-site. The records of these weights shall be maintained on site for a period of at least five years.
3. The permittee shall collect and record the following information each day:
The average temperature of the exhaust gases from the thermal incinerator during each of the 8 3-hour blocks of time during the day. Strip charts from the continuous temperature recorder for the thermal oxidizer shall be maintained on site.
Records of all sampling required by this permit shall be maintained on site.
All records required by this Permit to Operate shall be retained on file for a period of not less than five years, unless otherwise indicated by the Ohio Environmental Protection Agency. All records shall be made available to the representatives of the Ohio EPA during normal business hours.

D. Reporting Requirements

1. **Thermal Incinerator Temperature Reporting Requirements**
The permittee shall submit semi-annual temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the thermal incinerator does not comply with the temperature limitation specified above. These reports shall be submitted by July 30 and January 30 of each year and shall contain information for the preceding 6-month period.

E. Testing Requirements

1. **Emission testing requirements**
The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
The emission testing shall be conducted within 6 months prior to permit expiration.
The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate matter and volatile organic compounds, and the control efficiency limitation for volatile organic compounds.
The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A; and for volatile organic compounds, Method 25 of 40 CFR Part 60, Appendix A.
The test(s) shall be conducted while the emissions unit is operating at or near maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo DES.

F. Miscellaneous Requirements

1. Notice of Intent to Relocate

Pursuant to OAC Rule 3745-31-05(A)(6), the owner or operator of the portable or mobile source identified within this Permit to Operate may relocate within the State of Ohio without first obtaining a Permit to Install providing the following criteria are met:

The source is equipped with Best Available Control Technology for such source; and

The source is operating pursuant to a currently effective Permit to Operate; and

The applicant has provided proper notice of intent to relocate the source to the Director within a minimum of 30 days prior to the scheduled relocation; and

In the Director's judgement, the proposed site is acceptable under Rule 3745-15- 07 of the Administrative Code.

In order for the Director to determine compliance with all for the above criteria, the owner or operator of the portable or mobile source must file a "Notice of Intent to Relocate" at least 30 days prior to relocation of the source with the Toledo Division of Pollution Control. Upon receipt of the notice, the Director, or the Director's authorized representative, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio Environmental Protection Agency approval prior to relocation of the source may result in fines and civil penalties.

2. Permanent Site Requirements

If this unit is operated at any given location for greater than six months in any twelve month period, and if the source of contaminated soil is greater than two miles away from the rotary kiln remediation unit, then the owner/operator of this source shall comply with the following permanent site requirements.

Contaminated soil shall be stored in such a manner so that any storage pile run off shall be contained, captured and disposed of according to applicable regulations. This contaminated soil shall be stored on a concrete pad, or on ground covered with impervious material. This contaminated soil storage area shall also be in an enclosure. As a minimum, the enclosed area shall be comprised of a three sided building with a complete roof over the stored material.

The area beneath and around the processing unit shall be paved and kept clean from either contaminated soil or processed material.