

1

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

GENERAL PERMIT CONDITIONS

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

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

2

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

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 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 30 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

3

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

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 and regulations.

4

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Pennsylvania Crusher Corporation** located in **Summit** County. The emissions units 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.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K001 (Mod)	Miscellaneous Metal parts Coating Line.	Employment of an HVLP coating application method.	3745-31-05	1% opacity, as a six-minute average.
		Employment of spray booth exhaust fan filter elements.		52.8 lbs/day VOC* 9.6 TPY VOC*
		Compliance with the Ohio EPA "Air Toxics Policy."	3745-17-11	0.551 lb/hr Particulates 2.4 TPY PM
		Compliance with all terms and conditions of this permit.	3745-17-07	Less stringent than 3745-31-05.
			3745-21-09	See Additional Special Terms and Conditions.

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulates	2.4
VOC	9.6*

* Includes volatile organic compound (VOC) emissions from clean up.

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 Regional Air Quality Management District, 146 South High Street, Room 904, 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

7

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

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 Regional Air Quality Management District, 146 South High Street, Room 904, 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

A. Operations/Equipment

All of the following statements in this section are based upon application data and other information made available by the permittee.

Pennsylvania Crusher Corporation is applying for a Permit-to-Install (PTI) for an allowable emissions increase modification to their miscellaneous metal parts coating line

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

located in Cuyahoga Falls, OH. The permittee wishes to increase the current allowable daily coating usage limitation of 5 gals/day to 10 gals/day, thereby enabling the continued use of noncompliance coatings as regulated under Ohio Administrative Code (OAC) rule 3745-21-09(U)(2)(e). The permittee is well aware of the changes to OAC rule 3745-21-09(U)(2)(e), which are in the draft stage, reducing the 10 gals/day compliance coating exemption limit to 3 gals/day. The permittee will apply for a permit modification and either seek alternative coating formulations or use other methods of control to meet all applicable regulations, once the draft rule changes become final.

Coatings are applied using a high volume low pressure (HVLP) spray method with a solids transfer efficiency of 75% (according to STAPPA/ALAPCO, 1991) and are air-dried at ambient temperatures. Spray booth exhaust filter elements further reduce emissions of particulates with an assumed overall control efficiency for the spray booth and filter elements of 90%. Cleanup involves purging the paint guns with xylene in the spray booth with no recovery of purged material.

B. Potential Emissions

All of the following statements in this section are based upon application data and other information made available by the permittee.

According to the permittee, based on both coating formulation data and 10 gallons of coatings used per day, and also a maximum average daily usage of xylene (for cleanup) of 1 gallon per day, the proposed maximum daily emissions of volatile organic compounds (VOC's) are 52.8 pounds per day. Potential yearly emissions of VOC's are 9.6 tons per year. Since it is assumed that all hazardous air pollutants (HAP's) contained in the coatings and cleanup material are also VOC's, then potential yearly emissions of any individual HAP or combined HAP's are likewise 9.6 tons per year, less than the Title V threshold emission levels of 10 tons per year for any individual HAP and 25 tons per year for combined HAP's.

C. Emission Limits

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

The annual VOC emission limit is based upon the emissions unit's potential to emit. Therefore, no recordkeeping, deviation reporting, or emissions calculations are required to demonstrate compliance with this limit.

Pursuant to the best available technology (BAT) requirements for new sources, as covered under OAC rule 3745-31-05, the permittee shall perform the following:

Employment of a properly installed high volume low pressure (HVLP) spray application system, in accordance with the manufacturer's recommendations, instructions, and operating manual(s);

Employment of properly installed spray booth exhaust fan filter elements, in accordance with the manufacturer's recommendations, instructions, and operating manual(s);

Compliance with the OEPA "Air Toxics Policy", as described below; and

Compliance with all terms and conditions of this permit.

D. Operational Restrictions

The maximum number of gallons of all coatings employed shall not exceed 10 gallons per day.

Employment of only the coating formulations, as specified in the permit application, except when a lower VOC, HAP, and/or particulates emitting coating formulation can be employed, provided no violations result of the emission limits and the OEPA "Air Toxics Policy" (described below), as established in this permit to install.

E. Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each day for the coating line:

The name and identification number of each coating and cleanup material employed;

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

The VOC content of each coating, as applied, in pounds per gallon;

The VOC content of each cleanup material, in pounds per gallon;

The number of gallons of each coating, as applied;

The total number of gallons of all coatings employed;

The number of gallons of each cleanup material employed; and

The total VOC emission rate from all coatings and cleanup materials employed, in pounds.

F. Reporting requirements

The permittee shall submit required reports in the following manner:

Reports of any required monitoring and/or recordkeeping information shall be submitted to the Akron Regional Air Quality Management District;

Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures, which have been or will be taken, shall be submitted to the Akron Regional Air Quality Management District. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.);

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

The permittee shall submit quarterly reports which identify any exceedances of the daily miscellaneous metal parts coating usage limitation of 10 gallons/day, as well as the corrective actions that were taken to achieve compliance; and

The permittee shall submit deviation (excursion) reports identifying each day the VOC emissions from this emissions unit exceeded the VOC emissions limitation of 52.8 pounds per day and the actual VOC emissions for each such day.

G. Testing Requirements

Compliance with the emission limitations in this permit shall be determined in accordance with the following method(s):

Emission Limitation:

52.8 lbs/day of VOC

Applicable Compliance Method:

$E = \text{Sum of } (P \times V_p) \text{ for all paint formulations employed each day plus the sum of } (C \times V_c) \text{ for all cleanup materials employed each day}$

where,

$E = \text{VOC emission rate from all paint formulations and cleanup materials employed each day (lbs/day);}$

$P = \text{daily usage rate of each paint formulation employed each day (gals/day);}$

$V_p = \text{VOC content of each paint formulation employed each day (lbs/gal).}$

$C = \text{daily usage rate of each cleanup material employed each day (gals/day); and}$

12

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

Vc = VOC content of each cleanup material employed each day (lbs/gal).

Emission Limitation:

0.551 lb/hr of particulates

Applicable Compliance Method:

$E = P \times S \times (1-TE) \times (1-CE)$

where,

E = particulates emission rate (lbs/hr);

P = maximum paint usage rate (gals/hr);

S = maximum solids content of paint (lbs/gal);

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (TE = 0.75 for the HVLV method used at this facility); and

CE = control efficiency of the control equipment (CE = 0.90 for this facility).

Emission Limitation:

1% opacity as a 6-minute average

Applicable Compliance Method:

USEPA Method 9, 40 CFR Part 60, Appendix A

H. Miscellaneous Requirements

This permit allows the use of the coatings and cleanup material specified by the permittee in the application for PTI 16-1829. In conjunction with the best available technology requirements of OAC rule 3745-31-05, pollutant ground-level concentrations were derived in accordance with the Ohio EPA's "Air Toxics Policy", based on the coating usage rate, formulation data, and the design parameters of the emissions unit's exhaust system, as specified in the

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

permit application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for various pollutants based on the Screen3 model and a comparison of the predicted 1-hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for toluene:

Pollutant: toluene (CAS 108-88-3)

TWA (ug/m3): 188,000

Maximum Average Hourly Emission Rate (lbs/hr): 10

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 262

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476

As long as the application of the "Air Toxics Policy" continues to show compliance with the applicable MAGLC, the permittee may implement any of the following changes with prior notification to and approval from Akron Regional Air Quality Management District:

Any changes in the composition of the coatings or cleanup material, or the use of new coatings or cleanup material, that would result in the emission of a compound with a lower TWA threshold limit value, as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TWA value specified in the above table;

Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;

Any change in the composition of the coatings or cleanup material, or use of new coatings or cleanup material, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)]; and

Any change in the composition of the coatings or cleanup material, or use of new coatings or cleanup material, that would result in an increase in emissions of any HAPS as

14

Facility Name: **Pennsylvania Crusher Corporation**

Application Number: **16-1829**

Date: **October 7, 1998**

defined in OAC rule 3745-77-01(V).

For any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a permit to install prior to the change.