

Facility ID: 0634950025 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\*\*\*

Facility ID: 0634950025 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

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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>
P901 - 300 TPH portable Eagle Manufacturing model 1400-45 stone crusher with screens, conveyors with water spray bars and an attached 510 HP diesel 175 kW electric generator.	OAC rule 3745-31-05(A)(3) (PTI 06-08140 issued May 31, 2007)	Screening and transfer total fugitive particulate emissions (PE) shall not exceed a 4.56 tons per year.
		Crusher total fugitive PE shall not exceed a 0.66 tons per year.
		Visible emissions of fugitive dust discharging from the transfer points and conveyors shall not exceed 10% opacity.
		Visible emissions of fugitive dust discharging from the crusher shall not exceed 15% opacity.
510 HP diesel generator for 300 TPH portable aggregate plant	OAC rule 3745-17-07(B)(1)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c. through A.2.f).
	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	40 CFR Part 60 Subpart OOO	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Emissions shall not exceed: 5.4 lb/hr of nitrogen oxides (NOx), 23.7 TPY; 2.9 lb/hr of carbon monoxide (CO), 12.7 TPY. 1.1 lb/hr of sulfur dioxide (SO2), 4.9 TPY; 0.17 lb/hr of particulate emissions (PE) , 0.7 TPY; 1.3 lb/hr of organic compounds (OC), 5.7 TPY; and
	OAC rule 3745-17-11(B)(5)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5), 3745-17-07(A), and 3745-21-08(B). See section A.2.f. below. PE shall not exceed 0.310 lb/million Btu of actual heat input.

OAC rule 3745-17-07(A)(1)	Visible emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
OAC rule 3745-18-06(G)	Exempt. See section A.2.a. below.
OAC rule 3745-21-08(B)	See section A.2.b. below.

**2. Additional Terms and Conditions**

- (a) This emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B). The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

7 conveyor belts w/ 14 transfer points:

- Crusher to Grizzly storage
- Crusher to screen feed belt
- Screen feed belt
- Screen to fines
- Screen to 4's
- Screen to 57's
- Screen to 1's & 2's

The permittee shall employ best available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measures to ensure compliance:

material handling operation(s) control measure(s)

transfer points including load-in watering  
load-off to storage piles watering at storage pile

- conveyor belts watering
- Crusher to Grizzly storage
  - Crusher to screen feed belt
  - Screen feed belt
  - Screen to fines
  - Screen to 4's
  - Screen to 57's
  - Screen to 1's & 2's

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measure(s) is unnecessary.

Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

The engine shall meet USEPA Tier 2 emissions standards.

**B. Operational Restrictions**

- 1. The permittee shall only burn low sulfur No. 2 or diesel fuel, containing less than 0.5% sulfur by weight, in this emissions unit.

**C. Monitoring and/or Record Keeping Requirements**

- 1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s) minimum inspection frequency

All Daily

- 2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and,

- d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in C.3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 5. The permittee shall maintain documentation on the sulfur content, in percent by weight, of all fuels received.

**D. Reporting Requirements**

- 1. For material handling operations, the permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and,
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- 2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
- 3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**E. Testing Requirements**

- 1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:  
Emission Limitation:

Screening and Transfer: Visible emissions of fugitive dust discharging from the transfer points and conveyors shall not exceed 10% opacity.  
Crusher: Visible emissions of fugitive dust discharging from the crusher shall not exceed 15% opacity.

Compliance Method: If required, compliance with the visible emission limitations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.  
Emission Limitation:

Screening and Transfer: Screening and transfer total fugitive particulate emissions (PE) shall not exceed a 4.56 tons per year.  
Crusher: Crusher total fugitive PE shall not exceed a 0.66 tons per year.

Compliance Method: Compliance with the PE tons per year emission limits shall be demonstrated by the use of emission factors found in AP-42, Compilation of Air Pollutant Emission Factors, Emission factors from AP-42 Chapter 13, 13.2.4 (1/95) and Chapter 11, Tables 11.19.2-2 (8/04).

P901 - Crushing & Screening  
2,600,000 tons/yr max throughput, 425,000 tons/yr actual throughput  
Maximum operation, hr/yr 8760

**PE EMISSIONS CALCULATION**

Emission Point AP-42 PWR ER,unc Overall ER,cont Potential PWR Actual  
. EF,lb,ton TONS/HR lb/hr % Control lb/hr tons TONS/YR tons

Screening 0.0315 300 9.45 90 0.945 4.13 425000 0.67  
Primary Crushing 0.00504 300 1.512 90 0.1512 0.66 425000 0.11  
Convey(in plant) 0.003 300 0.882 90 0.0882 0.39 425000 0.06  
\*\*Truck Unload 3.36E-05 300 0.01008 90 0.001008 0.0044 425000 0.00  
\*\*Truck Load 0.00021 300 0.063 90 0.0063 0.028 425000 0.00

TOTAL PE 11.91 1.19 5.22 0.84

Emission factors from AP-42, 13.2.4 (1/95)  
\*\*Emission factors from AP-42, 11.19.2-2 (8/04)  
Crushing = 0.66 TPY  
Screening/conveying = 4.56 TPY  
TOTAL = 5.22 TPY  
Emission Limitation:

Emissions of NOx shall not exceed 5.4 lb/hr and 23.7 TPY.

Compliance Method: Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emissions factor from manufacturer's Tier 2 data (0.0106 lb/HP-hr) by the maximum rated capacity of P901 (510 HP).

Annual emissions shall be determined by multiplying the hourly NOx emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

**Emissions Limitation:**

Emissions of carbon monoxide (CO) shall not exceed 2.9 lbs/hr and 12.7 tons per year.

Compliance Method: Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emissions factor from manufacturer's Tier 2 data (0.0057 lb/HP-hr) by the maximum rated capacity of P901 (510 HP).

Annual emissions shall be determined by multiplying the hourly CO emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

**Emissions Limitation:**

Emissions of SO<sub>2</sub> shall not exceed 1.1 lbs/hr and 4.9 tons per year.

Compliance Method: Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor from the manufacturer's (0.00205 lb/HP-hr) by the maximum rated capacity of P901 (510 HP).

Annual emissions shall be determined by multiplying the hourly SO<sub>2</sub> emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

**Emission Limitation:**

Particulate emissions (PE) shall not exceed 0.17 lbs/hr and 0.7 tons per year.

Compliance Method: Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor from manufacturer's Tier 2 data (0.00033 lb/HP-hr) by the maximum rated capacity of P901(510 HP).

Annual emissions shall be determined by multiplying the hourly PE emission rate by the total number of hours operated per year and dividing by 2000 lbs/ton.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

**Emission Limitation:**

Emissions of OC shall not exceed 1.3 lbs/hr and 5.7 tons per year.

Compliance Method: Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor from manufacturer's data (0.00251 lb/HP-hr) by the maximum rated capacity of P901 (510 HP).

Annual emissions shall be determined by multiplying the hourly VOC emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

**Emission Limitation:**

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Compliance Method: If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

**Emission Limitation:**

PE shall not exceed 0.310 lb/million Btu of actual heat input.

Compliance Method: Compliance shall be determined based on the emission factor of 0.31 lb/million Btu specified in AP-42, Table 3.3-1 (10/96).

**Operational Limitation:**

Sulfur content of fuel restricted to less than 0.5%, by weight

Compliance Method: Compliance shall be based on recordkeeping as specified in Section C.5. of this permit.

**F. Miscellaneous Requirements**

1. At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(E).
2. Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(E), the following criteria

must be met for all portable facilities seeking approval for relocation:

- a. the portable source must possess an issued permit to install (PTI) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,
  - b. the portable source is operating pursuant to a currently effective PTI and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).
3. In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:
- a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;
  - b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
  - c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.  
  
Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".
4. In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(E) (i.e. the 15-day option), the following additional criteria must be met:
- a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;
  - b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);
  - c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
  - d. a public notice, consistent with OAC rule 3745-47, has been published in the county where the proposed site(s) is/are located;
  - e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.  
  
Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-05(E) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.
5. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.
6. When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01 (KKK) and (III), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.
7. Modeling to demonstrate compliance with ORC 3704.03(F)(4)(b) ["Review of New Sources of Air Toxics Emissions, Option A."] was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.