



State of Ohio Environmental Protection Agency

Street Address:

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P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL  
CUYAHOGA COUNTY  
Application No: 13-04581  
Fac ID: 1318958445**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 12/2/2005**

Hard Rock Crushing, Limited  
Aziz Uhsini  
14909 Arden Avenue  
Lakewood, OH 44107

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 Review Appeals Commission 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 within thirty (30) days after the notice of the Directors 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 Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control



**Permit To Install  
Terms and Conditions**

**Issue Date: 12/2/2005  
Effective Date: 12/2/2005**

**FINAL PERMIT TO INSTALL 13-04581**

Application Number: 13-04581  
Facility ID: 1318958445  
Permit Fee: **\$1250**  
Name of Facility: Hard Rock Crushing, Limited  
Person to Contact: Aziz Uhsini  
Address: 14909 Arden Avenue  
Lakewood, OH 44107

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**14909 Arden Avenue  
Lakewood, Ohio**

Description of proposed emissions unit(s):  
**Portable concrete crusher/screener with 3 conveyors -- F001.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(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 emissions unit(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 emissions unit(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

Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. 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 appropriate Ohio EPA District Office or local air agency. 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.)

#### **3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### **4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air

contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

**9. Construction of New Sources(s)**

The proposed emissions unit(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 cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(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 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 cannot meet the requirements of this permit or cannot meet applicable standards.

**10. 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.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. 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.

**13. Source Operation and Operating Permit Requirements 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. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

#### **14. 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.

#### **15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

### **B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

#### SUMMARY (for informational purposes only) TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	11.9
PM10	4.4
NOx	17.5
CO	4.0
SOx	1.1

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

- The specific operations(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 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>
F001 - Portable concrete crusher - 100 tons/hour	OAC rule 3745-31-05 (A)(3)	2.4 lbs/hour and 10.7 tons/year of particulate emissions 1.02 lb/hour and 4.4 tons/year of PM <sub>10</sub> emissions  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.a)  Visible emissions of fugitive dust shall not exceed ten percent opacity, as a six minute average.
	OAC rule 3745-17-07 (B)(1)	The visible particulate emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08 (B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).
0.9 mm Btu/hr diesel generator	OAC rule 3745-31-05(A)(3)	0.28 lb/hr of PE and 1.2 ton/year of PE emissions  4.0 lbs/hour of NO <sub>x</sub> emissions and 17.5 tons/year

	0.9 lbs/hour of CO emissions and 4.0 tons/year
	0.26 lb/hour of SO2 emissions and 1.1 ton/year
	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(5)(a) and 3745-17-07(A).
OAC rule 3745-17-07(A)	twenty percent opacity, as a six-minute average, except as provided by rule
OAC rule 3745-17-11(B)(5)(a)	0.31 lb/mmBtu of particulate emissions of actual heat input

**2. Additional Terms and Conditions**

**2.a** The permittee shall employ best available control measures for the crushing operation for the purpose of ensuring compliance with the applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to employing water spray bars at the hopper charging point, after crushing operations, at the end of each conveyor belt and all screening points within the process to ensure compliance. The permittee shall also minimize the free fall distance of the processed material. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.b** For each phase of the crushing operation that is not adequately enclosed, the control measure(s) 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 measure(s) is (are) necessary to ensure compliance with the applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the crusher until further observation confirms that use of the control measure(s) is unnecessary.

**2.c** The portable crushing plant that is covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

- Front end load to hopper
- 100 ton per hour crusher
- Screening operation
- (3) Conveyor belts

**2.d** Label this portable concrete batching plant as 130-4581.

**B. Operational Restrictions**

1. The permittee shall only burn low sulfur diesel, containing less than 0.5 % sulfur by weight, in this emissions unit.

**C. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for crushing operations that are not adequately enclosed, the permittee shall perform daily inspections of such operations.
2. The above mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Cleveland Division of Air Quality, modify the above mentioned inspection frequencies if operating experience indicated that less frequent inspections would be sufficient to ensure compliance with the applicable requirements.
4. 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 measure(s);
  - c. the dates the control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d shall be kept separately for each material handling operation, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain daily records of the following information:
  - a. the application of water and/or chemical additives;
  - b. the name of the equipment operator responsible for the treatment; and,
  - c. the general weather conditions for each day, with respect to temperature, precipitation, wind speed and wind direction.

6. 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. The permittee shall also maintain documentation on the sulfur content of all fuels received.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports to the Cleveland Division of Air Quality 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.

These deviation (excursion) reports shall be submitted in accordance with the general terms and conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the BAT limit for fugitive opacity contained in this permit using Method 9.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
Visible emissions of fugitive dust shall not exceed ten percent opacity, as a six minute average  
  
Applicable Compliance Method:  
Compliance with the above visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.
  - b. Emission Limitations:  
2.4 pound/hour and 10.7 tons/year of PE emissions  
1.02 pound/hour and 4.4 tons/year of PM<sub>10</sub> emissions

**Applicable Compliance Method**

Compliance with the hourly PE/PM<sub>10</sub> emission limitation shall be determined using the emission factors for crushing and material handling operations in AP-42, Chapter 11.19.2 (Crushed Stone Processing), Fifth Edition, dated 1/1995 and for truck dumping operations in AP-42, Chapter 13.2.4 (Aggregate Handling and Storage Piles), Fifth Edition, dated 1/1995. The emission factors from AP-42, are 0.000016 for PM<sub>10</sub> for hopper loading, 0.0050 for PM and 0.0024 for PM<sub>10</sub> for primary crushing, and 0.0029 for PM and 0.0014 for PM<sub>10</sub> for conveyors in pounds/ton. The calculated emission factors for truck dumping are 0.046 lb per ton of materials handled for PM emissions and 0.022 lb per ton of materials handled for PM<sub>10</sub> emissions. These emissions factors shall be multiplied by the maximum process weight rate, in tons/hour, for each operation identified in A.2 and summed, and multiply by (1-.70) to account for the 70% watering emission control efficiency. For hopper loading PM emissions, multiply the PM<sub>10</sub> emissions by a factor of 2.1.

The tons/year limitations were developed by multiplying the pound/hour by 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

- c. Emission Limitation:**  
1.2 ton/year of PM from the diesel fired engine

**Applicable Compliance Method**

The ton/year limitation was developed by multiplying the lb/hour by the maximum operating schedule of 8760 hours/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

- d. Emission Limitation:**  
4.0 lbs/hour of NO<sub>x</sub> emissions from the diesel fired engine

**Applicable Compliance Method**

Compliance with the hourly NO<sub>x</sub> emission limitation shall be determined by multiplying the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 3.3, Table 3.3-1 (4.41 lbs NO<sub>x</sub>/mmBtu), by the capacity (0.9 mm Btu/hr).

- e. Emission Limitation:**  
17.5 tons/year of NO<sub>x</sub> emissions from the diesel fired engine

**Applicable Compliance Method**

The tons/year limitations were developed by multiplying the pound/hour by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton.

Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

- f.** Emission Limitation:  
0.9 lbs/hour of CO emissions from the diesel fired engine

**Applicable Compliance Method**

Compliance with the hourly CO emission limitation shall be determined by multiplying the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 3.3, Table 3.3-1 (0.95 lb CO/mmBtu), by the capacity (0.9 mm Btu/hr).

- g.** Emission Limitation:  
4.0 tons/year of CO emissions from the diesel fired engine

**Applicable Compliance Method**

The tons/year limitations were developed by multiplying the pound/hour by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

- h.** Emission Limitation:  
0.26 lb/hour of SO<sub>2</sub> emissions from the diesel fired engine

**Applicable Compliance Method**

Compliance with the hourly SO<sub>2</sub> emission limitation shall be determined by multiplying the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 3.3, Table 3.3-1 (0.29 lb SO<sub>2</sub>/mmBtu) by the capacity (0.9 mm Btu/hr).

- i.** Emission Limitation:  
1.1 tons/year of SO<sub>2</sub> emissions from the diesel fired engine

**Applicable Compliance Method**

The tons/year limitations were developed by multiplying the pound/hour by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

- j.** Emission Limitation:  
0.31 lb PE/mmBtu and 0.28 lb PE/hr from the diesel fired engine

**Applicable Compliance Method**

Compliance with the hourly PE limitation shall be determined from the emission factor taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 3.3, Table 3.3-1 (0.31 lb PE/mmBtu).

Multiply the emission factor by the capacity (0.9 mmBtu/hr) to determine the hourly emission rate. If required, compliance shall be determined using Method 5 of 40 CFR Part 60, Appendix A.

- k.** Emission Limitation:  
twenty percent opacity, as a six-minute average, except as provided by rule (from the diesel fired engine)

Applicable Compliance Method:  
Compliance shall be determined using USEPA Method 9 of 40 CFR Part 60.

## **F. Miscellaneous Requirements**

- 1.** Pursuant to Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:
  - a.** the portable emissions unit is equipped with the best available technology for such portable emissions unit;
  - b.** the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO);
  - c.** the applicant has provided proper notice of intent to relocate the portable emissions unit to the Cleveland Division of Air Quality and the appropriate field office having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and
  - d.** in the Cleveland Division of Air Quality's and the appropriate field office's judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.
  
- 2.** In the alternative, pursuant to OAC rule 3745-31-03 (A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria of OAC rule 3745-31-05(F) are met:
  - a.** the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
  - b.** the portable emissions unit is equipped with best available technology;
  - c.** the portable emission unit owner has identified the proposed site to Ohio EPA;
  - d.** Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;

- e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
  - f. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to the proposed site; and
  - g. the portable emissions unit owner has provided the Ohio EPA with fifteen days written notice of the relocation.
3. Any site approvals issued by the Ohio EPA, pursuant to F.2 above, shall be valid for no longer than three years and are subject to renewal.

In order for the Cleveland Division of Air Quality and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate," within the specified time frame (30 to 15 days) prior to the relocation of the emissions unit with the Cleveland Division of Air Quality (1925 St. Clair Avenue, Cleveland, Ohio 44114) and the appropriate office jurisdiction over the new site. Upon receipt of the notice, the Cleveland Division of Air Quality and/or the appropriate field office having jurisdiction over the new site, will evaluate the request in accordance with the above criteria. Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

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.