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Facility Name: **Harbison Walker Refractories Company**

Application Number: **16-1785**

Date: **August 26, 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.

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

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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.

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The air contaminant emissions units listed below comprise the Permit to Install for **Harbison Walker Refractories Company** located in **Portage** 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>
P901	Refractory materials crusher.	Use of a fabric filter. See Additional Special Terms and Conditions.	3745-31-05	Visible particulate emissions from the exhaust stack shall not exceed 1% opacity, as a six-minute average. 1.5 lbs/hr particulate emissions from the exhaust stack. 6.6 TPY PM No visible particulate emissions of fugitive dust from this emissions unit, except for a total cumulative time of five minutes during any 60-minute observation period.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P901 (Cont)			3745-17-07	Less stringent than 3745-31-05
			3745-17-11	Less stringent than 3745-31-05.
			3745-17-08	See Additional Special Terms and Conditions.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate Matter	6.6 *

* Baghouse stack emissions

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, Rom 904, Akron, Ohio 44308.**

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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 Regional Air Quality Management District, 146 South High Street, Rom 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.

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ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Permit Profile

1. Operations/Equipment Description

The Harbison Walker Refractories Company facility (OEPA ID #1667090000) located in Windham, Portage County, Ohio, a Title V facility based on potential emissions of particulates, is seeking a Permit-to-Install (PTI) for a new emissions unit (OEPA ID #P901) to crush off-specification fired and unfired (green) refractory materials prior to these materials being recycled to the refractory material manufacturing process. The refractory materials crusher, a significant ("significant" per OEPA Engineering Guide #24) fugitive dust source, is controlled via a fabric filter (baghouse) with a reported maximum design air flow rate of 6000 actual cubic feet per minute (ACFM) at 77 degrees Fahrenheit. The permittee reports a maximum design process capacity of Emissions Unit P901 of 44 tons per hour of crushed refractory material.

2. Best Available Technology (BAT) Determination

The permittee shall employ best available technology (BAT), pursuant to the requirements of OAC rule 3745-31-05 for new sources, to control particulate emissions and reduce fugitive dust from this emissions unit. The control technology shall include the following:

- a. installation and employment, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), a baghouse to adequately control particulate emissions; and
- b. installation and employment of hoods, ducts, fans, and other equipment, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), to adequately enclose, contain, capture, and vent particulate emissions to the baghouse.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 -6 inches of water, while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse, while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The permittee shall collect and record daily the pressure drop across the baghouse, while the emissions unit is in operation.

D. Reporting requirements

1. 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 Akron Air Pollution Control; and,
 - 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 Akron Air Pollution Control. 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

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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.)

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

E. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:

1.5 lbs/hr particulate emissions from the exhaust stack

Applicable Compliance Method:

If necessary, the permittee may be required to demonstrate compliance of the above limitation by testing in accordance with USEPA Method 5, 40 CFR Part 60, Appendix A

- b. Emission Limitation:

Visible particulate emissions from the exhaust stack shall not exceed 1% opacity, as a six-minute average

Applicable Compliance Method:

USEPA Method 9, 40 CFR Part 60, Appendix A

- c. Emission Limitation:

No visible particulate emissions of fugitive dust from this emissions unit, except for a total cumulative time of 5 minutes during any 60-minute observation period

Applicable Compliance Method:

USEPA Method 22, 40 CFR Part 60, Appendix A

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F. Miscellaneous Requirements

None