



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
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Columbus, OH 43215

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

**RE: DRAFT PERMIT TO INSTALL  
MONTGOMERY COUNTY  
Application No: 08-04237**

**CERTIFIED MAIL**

**DATE:** 3/13/2001

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
40 CFR, Subpart 60 I	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Shelly Materials Plant 41  
Larry Shively  
P.O. Box 266  
Thornville, OH 43076-9790

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1000** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control



**Permit To Install**

**Issue Date: To be entered upon final issuance**

**Terms and Conditions**

**Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 08-04237**

Application Number: 08-04237

APS Premise Number: 0857191343

Permit Fee: **To be entered upon final issuance**

Name of Facility: Shelly Materials Plant 41

Person to Contact: Larry Shively

Address: P.O. Box 266  
Thornville, OH 43076-9790

Location of proposed air contaminant source(s) [emissions unit(s)]:

**4710 West Carrollton-Soldiers Home Rd  
West Carrollton, Ohio**

Description of proposed emissions unit(s):

**waste oil, #6 fuel oil and #2 fuel oil; chapter 31 replacing 08-1436 issued 6-2-88.**

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

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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 Related to Monitoring and Recordkeeping 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

#### **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**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(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>
CO	56.25
NO <sub>x</sub>	15
SO <sub>2</sub>	12.5
VOC	6.25
PM	0.79
Lead	0.11
HCL	1.25

**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>
P002 - 350 tons/hour, asphaltic concrete batch plant: rotary dryer, hot aggregate elevator, vibrating screens, and weigh hopper controlled with baghouse	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 60.11 and OAC rule 3745-17-07(B).
		0.79 ton/yr of particulate; 157.5 lbs/hr and 56.25 tons/yr* carbon monoxide; 42 lbs/hr and 15 tons/yr* nitrogen oxides; 35 lbs/hr and 12.5 tons/yr* sulfur dioxide; 17.5 lbs/hr and 6.25 tons/yr* volatile organic compounds; 0.30 lb/hr and 0.11 ton/yr lead; 0.98 lb/hr and 0.35 ton/yr* hydrogen chloride;
	NSPS 40 CFR Part 60, Subpart I	The ton/yr limitations are based upon a rolling 12-month summation.
		Particulate emissions shall not exceed 0.04 grain per dry standard cubic foot of exhaust gases.
		Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, from the stack, except as provided by 40 CFR Part 60.11.
	OAC rules 3745-17-07(A) and 3745-	The emission limitations specified in

	17-11(B)	these OAC rules are less stringent than the emission limitation specified in 40 CFR Part 60, Subpart I.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper shall not exceed 20 percent opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The installation and use of adequate enclosures and sufficient draft to minimize or eliminate visible emissions of fugitive dust from the hot aggregate elevator, vibrating screens, and weigh hopper.
aggregate storage bins and cold aggregate elevator	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B) and 3745-17-08(B).
	OAC rule 3745-17-07(B)	Visible particulate emissions shall not exceed 20 percent opacity, as a 3-minute average, for the fugitive dust emissions.
	OAC rule 3745-17-08(B)	The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the elevator loading area.  The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize or eliminate the visible emissions of fugitive dust from the elevator and the transfer point to the dryer.

**2. Additional Terms and Conditions**

**2.a** This emissions unit has been approved for the use of recycle asphalt products.

**2.b** The 157.5 lbs/hr of CO, 42 lbs/hr of NOx, 35 lbs/hr of SO2, 17.5 lbs/hr of VOC, 0.30 lb/hr

of PB, 3.5 lbs/hr HCL emissions limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

**2.c** Terms in this permit supercede those identified in PTI 08-1436 issued 6/02/88.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water when the emissions unit is in operation.
2. The maximum annual production rate for this emissions unit shall not exceed 250,000 tons per year, based upon a rolling, 12-month summation.
3. The maximum annual used oil for this emission unit shall not exceed 500,000 gallons per year.
4. All recycled, used oil burned in this emissions unit shall meet the following specifications:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	60 ppm, maximum
PCB's	10 ppm, maximum*
total halogens	4000 ppm maximum**
mercury	1 ppm, maximum
flash point	100 degrees Fahrenheit, minimum
heat content	135,000 Btu/gallon, minimum
sulfur content	0.5%

\* If the permittee is burning used oil with any quantifiable level (2ppm) of PCBs, then the permittee is subject to the notification requirements of 40 CFR 279.62.

\*\* Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 266.40(c) and OAC rule 3745-279-50. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ['marketer' in 40 CFR 266.43(a)] has demonstrated to Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

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

1. The permittee shall properly, operate, and maintain equipment to monitor the pressure drop across the baghouse when 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). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain monthly records of the following information:
  - a. the total quantity of asphalt products produced each month; and
  - b. the rolling, 12-month summation of the monthly production rates.
  - c. the total gallons of used oil burned.
3. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
  - a. The date of shipment or delivery.
  - b. The quantity of used oil received.
  - c. The Btu value of the used oil, in BTU/gallon.
  - d. The flash point of the used oil in degrees F.
  - e. The arsenic content, in ppm.
  - f. The cadmium content, in ppm.
  - g. The chromium content, in ppm.
  - h. The lead content, in ppm.
  - i. The PCB content, in ppm.
  - j. The total halogen content, in ppm.
  - k. The mercury content, in ppm.
  - l. The sulfur content in %.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPS District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

4. The permit to install for this emissions unit (P002) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other appropriate model). The

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predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl

TLV (mg/m<sup>3</sup>): 7.57

Maximum Hourly Emission Rate (lb/hr): 3.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 14.60

MAGLC (ug/m<sup>3</sup>): 132.84

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of materials or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienist (ACGIH), "than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

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- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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

1. 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. The deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports to the Director (the appropriate District Office or local air agency) which identify all exceedances of the rolling, 12-month production rate limitation. The deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the USEPA and the Ohio EPA (appropriate DO or LAA) if any of the used oil exceeds the used oil specifications. An identification number from USEPA shall be obtained prior to the combustion of any used oil.

Before the permittee accepts the first shipment of any off-specification used oil from a marketer, the permittee must provide the marketer a one-time, written and signed notice certifying that:

- a. the company has notified USEPA of its used oil management activities and that the notice included the location and description of those activities; and
- b. the company will burn the used oil only in an industrial furnace or boiler identified in 40 CFR Part 266.41(b) and OAC rule 3745-279-42.

A copy of each certification notice that the permittee sends to a marketer must be kept on file for a minimum of 5 years from the date it last received off-specification used oil from that marketer.

4. The permittee shall submit annual reports which specify any exceedances of the annual used oil limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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

1. Compliance with the emissions limitation(s) in section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.04 gr/dscf of particulates

Applicable Compliance Method -

Compliance shall be demonstrated through stack testing in accordance OAC rule 3745-17-03(B)(10).

- b. Emission Limitation-  
0.79 ton/yr of particulates

Applicable Compliance Method-

Compliance shall be determined by multiplying the average hourly emission rate in pounds per ton of asphaltic concrete production from the most recent compliance test by each 12-months production summation and dividing by 2,000 lbs/ton. Until additional emission tests are conducted, the average hourly emission rate of 0.0063 lb/ton shall be used in this calculation.

- c. Emission Limitation-  
157.5 lbs/hr of CO

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum hourly production rate of 350 tons/hr by the 0.45 lb CO/ton (AP-42 Section 11.1, Table 11.1-7, 12/00, 0.40 lb CO/ton). If required, compliance shall be based on conducting a stack test in accordance with USEPA Reference Method 10, of 40 CFR Part 60, Appendix A.

Emissions Limitation-  
56.25 tons/yr of CO

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in C.2, multiplying each 12-month production summation by the 0.45 lb CO/ton emission factor and dividing by 2,000 lbs/ton.

- d. Emission Limitation-  
42 lbs/hr of NO<sub>x</sub>

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum hourly production rate of 350 tons/hr by the 0.12 lb NO<sub>x</sub>/ton emission factor (AP-42 Section 11.1, Table 11.1-7, 12/00). If required, compliance shall be based on conducting a stack test in accordance with USEPA Reference Method 7 or 7A (as appropriate), of 40 CFR Part 60, Appendix A.

Emissions Limitation-  
15 tons/yr of NO<sub>x</sub>

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Applicable Compliance Method-

Compliance shall be based on the record keeping specified in C.2, multiplying each 12-month production summation by the 0.12 lb NOx/ton emission factor and dividing by 2,000 lbs/ton.

- e. Emission Limitation-  
35 lbs/hr of SO<sub>2</sub>

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum hourly production rate of 350 tons/hr by the 0.10 lb SO<sub>2</sub>/ton company derived emission factor (AP-42 Section 11.1, Table 11.1-7, 12/00, 0.088 lb SO<sub>2</sub>/ton).

Emissions Limitation-  
12.5 tons/yr of SO<sub>2</sub>

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in C.2, multiplying each 12-month production summation by the 0.10 lb SO<sub>2</sub>/ton emission factor and dividing by 2,000 lbs/ton.

- f. Emission Limitation-  
17.5 lbs/hr of VOC

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum hourly production rate of 350 tons/hr by the 0.050 lb VOC/ton company derived emission factor (AP-42 Section 11.1, Table 11.1-7, 12/00, 0.036 lb VOC/ton).

Emissions Limitation-  
6.25 tons/yr of VOC

Applicable Compliance Method-

Compliance shall be based on the record keeping specified in C.2, multiplying each 12-month production summation by the 0.050 lb VOC/ton emission factor and dividing by 2,000 lbs/ton.

- g. Emission Limitation-  
0.30 lb/hr of Lead

Applicable Compliance Method-

Compliance shall be determined by multiplying the maximum concentration of 60 ppm in the used oil by a density of 7.17 lbs/gal of oil. The resulting emission factor of 0.00043 lb/gal shall then be multiplied by the maximum hourly oil usage of 700 gallons/hr.

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Emissions Limitation-  
0.11 ton/yr of Lead

Applicable Compliance Method-  
Compliance shall be determined by multiplying the maximum oil usage per year by the emission factor of 0.00043 lb/gal and dividing by 2,000 lbs/ton.

- h. Emission Limitation-  
3.5 lbs/hr HCL

Applicable Compliance Method-  
Compliance shall be determined by multiplying the maximum hourly production rate of 350 tons/hr times an emission factor of 0.01 lb/ton. If required, compliance shall be based upon stack testing employing USEPA Reference Method 26 or 26A (as appropriate), of 40 CFR Part 60, Appendix A.

Emission Limitation -  
1.25 tons/yr HCl

Applicable Compliance Method -  
Compliance shall be based on the record keeping specified in term and condition number C.2., multiplying the 12-month production summation by the 0.01 lb/ton emission factor and dividing by 2,000 lbs/ton.

- i. Emissions Limitation-  
20 percent opacity as a 3-minute average, fugitive emissions

Applicable Compliance Method-  
Compliance shall be demonstrated through visible emissions observations in accordance with OAC rule 3745-17-03(B)(3).

- j. Emissions Limitation-  
20 percent opacity as a 6-minute average, from the stack

Applicable Compliance Method-  
Compliance shall be demonstrated through visible emissions observations in accordance with OAC rule 3745-17-03(B)(1).

- k. Emission Limitation-  
no visible emissions from the enclosures

Applicable Compliance Method-  
Compliance shall be demonstrated through visible emissions observations in accordance with OAC rule 3745-17-03(B)(4).

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**Emissions Unit ID: P002**

2. During the first full production season in which this permit is effective, the permittee shall conduct, or have conducted, an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for carbon monoxide. The **CO test** shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 10, of 40 CFR Part 60, Appendix A", while the emissions unit is operating at or near maximum capacity and using only "virgin aggregate".

During the first full production season in which this permit is effective, the permittee shall conduct, or have conducted, an emission test for this emissions unit in order to demonstrate compliance with the allowable mass emission rate for nitrogen oxides. The **NOx test** shall be conducted in accordance with the test methods and procedures specified in "USEPA Reference Method 7 or 7A (as appropriate), of 40 CFR Part 60, Appendix A", while the emissions unit is operating at or near maximum capacity and using only "virgin aggregate".

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates(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 field office's refusal to accept the results of the emissions test(s).

Personnel from the 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 regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emission test(s) shall be submitted 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 appropriate Ohio EPA District Office or local air agency.

## **F. Miscellaneous Requirements**

none

**Shelly Materials Plant 41**  
**PTI Application: 08-04237**  
**Issued: To be entered upon final issuance**

**Facility ID: 0857191343**  
**Emissions Unit ID: P002**

PTI Number: 08-04237 0857191343 ID P002

EMISSIONS UNIT DESCRIPTION Hot Mix Asphalt concrete batch plant

DATE INSTALLED 3/88

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment			0.04 gr/dscf	0.79
PM <sub>10</sub>					
Sulfur Dioxide	attainment			35 lbs/hr	12.5
Organic Compounds	attainment			17.5 lbs/hr	6.25
Nitrogen Oxides	attainment			42 lbs/hr	15
Carbon Monoxide	attainment			157.5 lbs/hr	56.25
Lead	attainment			0.30 lb/hr	0.11
Other: Air Toxics HCL	unclassified			3.5 lbs/hr	1.25

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? 40 CFR, PSD? OFFSET POLICY?  
Subpart 60 I

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

**BAT is compliance with the applicable OAC rules, NSPS and specified allowable mass emission rates through the use of a fabric filter baghouse control; monitoring and recording; reporting.**

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**Shelly Materials Plant 41**

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**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*?                      x                      YES                                              NO

IDENTIFY THE AIR CONTAMINANTS:   hydrogen chloride  

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**Shelly Materials Plant 41**  
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**Emissions Unit ID: P002**

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to [airpti@epa.state.oh.us](mailto:airpti@epa.state.oh.us)

<i>Please fill out the following. If the checkbox does not work, replace it with an 'X'</i>	<u>Electroni</u> <u>c</u>	<u>Additional information File</u> <u>Name Convention (your PTI</u> <u># plus this letter)</u>	<u>Hard</u> <u>Copy</u>	<u>None</u>
Calculations (required)	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):  
NSR Discussion

Shelly Material Plant #41 located in Montgomery county is a asphaltic concrete batch plant. This PTI modification is due to the plant plans to use recycled used oil as the main source of fuel beginning with the 2001 construction season. This plant is controlled by a baghouse with a 99% control efficiency and is also subject to NSPS. The facility has agreed to be limited to a 12-month rolling production rate of 250,000 tons/yr which represents levels of operation that would result in minor emission amounts (i.e., classification as a minor source) based on EPA Potential to Emit (PTE) Guidance for Specific Source Categories 4/14/98.

Modeling to demonstrate compliance with the Air Toxics Policy was required for HCL because the maximum annual emissions for HCL a toxic compound is greater than 1.0 TPY. The modeling demonstrated compliance with Ohio EPA Air Toxic Policy.

BAT is compliance with the applicable OAC rules, NSPS and specified allowable mass emission rate through the use of a baghouse; monitoring and recording; reporting.

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

- Synthetic Minor Determination and/or  Netting Determination  
 Permit To Install ENTER PTI NUMBER HERE

**A. Source Description**

**B. Facility Emissions and Attainment Status**

Shelly Materials Plant 41

PTI Application: 08-04237

Issued: To be entered upon final issuance

Facility ID: 0857191343

Emissions Unit ID: P002

**C. Source Emissions**

**D. Conclusion**

**PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:**

**NONE**

**Please complete:**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	56.25
NOx	15
SO2	12.5
VOC	6.25
PM	0.79
Lead	0.11
HCL	1.25