



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LICKING COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 01-08326

DATE: 8/23/2001

Shelly Materials Plant 63
Larry Shively
Post Office Box 266 8775 Blackbird Ln
Thornville, OH 43076

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

CDO



**Permit To Install
Terms and Conditions**

**Issue Date: 8/23/2001
Effective Date: 8/23/2001**

FINAL PERMIT TO INSTALL 01-08326

Application Number: 01-08326
APS Premise Number: 0145020323
Permit Fee: **\$0**
Name of Facility: Shelly Materials Plant 63
Person to Contact: Larry Shively
Address: Post Office Box 266 8775 Blackbird Ln
Thornville, OH 43076

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

**6824 Mt Vernon Rd
Newark, Ohio**

Description of proposed emissions unit(s):

Modification to PTI 01-08326 issued July 19, 2001. Final terms were for incorrect facility due to admin error; 260 ton per hour asphalt batch plant.

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 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

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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

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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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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>
PE	8.4
CO	90.0
SO₂	20.0
NO_x	24.0
VOC	10.0

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. Applicable Emissions Limitations and/or Control Requirements**

1. 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.

Operations, Property,
and/or Equipment

P901 - 260 ton per hour asphalt batch plant fired with number 2 fuel, natural gas or on specification used oil (Chapter 31 modification to PTI 01-04220 issued on November 10, 1993).

Aggregate storage bins and cold aggregate elevator.

Applicable Rules/Requirements

OAC rule 3745-31-05(A)(3)

OAC rule 3745-31-05(A)(3)

OAC rule 3745-31-05(D)

OAC rule 3745-17-07(A)(1)
OAC rule 3745-17-11(B)(1)
OAC rule 3745-18-06(E)
40 CFR Part 60, Subpart I, section
60.92(a)(2)

40 CFR Part 60, Subpart I, section
60.92(a)(1)

Applicable Emissions Limitations/Control Measures		
Particulate (PE) emissions when burning natural gas, fuel oil or on-spec used oil shall not exceed 10.92 lbs/hr and 8.4 tons per rolling 12 month period.	See II.A.2.a, II.A.2.b and II.A.2.d below.	Visible emissions of fugitive dust shall be less than or equal to 10 percent opacity, as a 3 minute average.
Carbon monoxide (CO) emissions when burning natural gas, fuel oil or on-spec used oil shall not exceed 117 lbs/hr.	The requirements of this rule also include compliance with OAC rule 3745-31-05(D) and 40 CFR Part 60, Subpart I, Section 60.92(a)(1).	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.
Sulfur dioxide (SO ₂) emissions when burning natural gas, fuel oil, or on-specification used oil shall not exceed 26 lbs/hr.	CO emissions from burning on-spec used oil, natural gas or fuel oil shall not exceed 90.0 tons per rolling 12 month period.	The aggregate loaded into the storage bins shall have a moisture content sufficient to eliminate the visible emission of fugitive dust from the elevator and the transfer point to the dryer.
Nitrogen dioxide (NO _x) emissions when burning natural gas, fuel oil or on-specification used oil shall not exceed 31.2 lbs/hr.	SO ₂ emissions from burning on-spec used oil, natural gas or fuel oil shall not exceed 20.0 tons per rolling 12 month period.	
Volatile organic compound (VOC) emissions from burning natural gas, fuel oil or on-specification used oil shall not exceed 13.0 lbs/hr and 10.0 tons/yr.	NO _x emissions from burning on-spec used oil, natural gas or fuel oil shall not exceed 24.0 tons per rolling 12 month period.	
Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in A.2.c below.	See II.B.3.below.	
Visible particulate emissions from the stack shall not exceed 20% opacity as a three minute average.	The emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).	
No visible emission of fugitive dust	Particulate emissions when burning natural gas, fuel oil or on-specification used oil shall not exceed 0.04 gr/dscf.	

2. Additional Terms and Conditions

- 2.a** The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- 2.b** In accordance with OAC rule 3745-31-05, this emission unit has been approved for the use of recycled asphalt products (RAP). The permittee shall be restricted to the maximum percentage of RAP as specified in the most recent compliance demonstration utilizing RAP.
- 2.c** All 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	100 ppm, maximum
total halogens	4000 ppm, maximum
flash point	100°F, minimum
heat content	135,000 Btu/gallon, minimum
PCB*	<2 ppm, maximum
mercury	1 ppm, maximum

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

- 2.d** Used oil containing more than one thousand parts per million (ppm) total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. 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 Part 266.43(a)] has demonstrated to Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

B. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water while the emissions unit is in operation.

2. The permittee may not receive or burn any used oil which does not meet the specifications listed in A.2.c of this permit without first obtaining a permit to install that authorizes the burning of such off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
3. The maximum annual production rate for this emissions unit shall not exceed 400,000 tons, based upon a rolling, 12-month summation of the production rates. The permittee has existing data on which to base the 12-month summation of the production rates.

C. Monitoring and/or Recordkeeping Requirements

1. 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. date of shipment or delivery;
 - b. quantity of used oil received;
 - c. the Btu value of the used oil;
 - d. the flash point of the used oil;
 - e. the arsenic content;
 - f. the cadmium content;
 - g. the chromium content;
 - h. the lead content;
 - i. the PCB content;
 - j. the total halogen content; and
 - k. the mercury content.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Ohio EPA Central District Office 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.
2. 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). The permittee shall record the pressure drop across the baghouse on a daily basis.
 3. The permittee shall maintain monthly records of the following information:
 - a. the production rate (tons);
 - b. the rolling, 12-month summation of the production rates; and
 - c. the type and amount (gallons and/or cubic feet) of fuel burned.
 4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the enclosures for the hot aggregate elevator, vibrating screens, weigh hopper, aggregate storage bins and cold aggregate elevator associated with this emissions unit. The presence or absence of any visible particulate emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any abnormal visible emission incident; and
 - e. any corrective actions taken to eliminate the abnormal visible emissions.

The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned visible particulate emissions check frequency if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the visible particulate emissions requirements.

Emissions Unit ID: **P901**

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operation log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operation;
 - c. if the emissions are not representative of normal operation, the cause of the abnormal emissions;
 - d. the total duration of any abnormal visible emission incident; and
 - e. any corrective actions taken to eliminate the abnormal emissions.

The permittee may, upon receipt of written approval from the Ohio EPA Central District Office, modify the above-mentioned visible particulate emissions check frequency if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the visible particulate emissions requirements.

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. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation. These reports are due by the date described in Part 1- General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall submit deviation (excursion) reports to the Central District Office that identify any of the following occurrences:

- a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
- b. describe any corrective actions taken to eliminate the abnormal visible particulate emissions.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

5. The permittee shall submit deviation reports to the Central District Office that identify any of the following occurrences:
 - a. identify all days during which any visible fugitive particulate emissions were observed from the enclosures for the hot aggregate elevator, vibrating screens, weigh hopper, aggregate storage bins and cold aggregate elevator associated with this emissions unit; and
 - b. describe any corrective actions taken to eliminate the abnormal visible particulate emissions.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

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:
 - a. Emissions Limitation:
Particulate (PE) emissions when burning on-spec used oil, natural gas or number 2 fuel shall not exceed 10.92 lbs/hr and 0.04 gr/dscf.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 120 days after initial startup of the emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the

Emissions Unit ID: P901

allowable mass emission rate for particulate matter.

iii. The following test method(s) shall be employed to demonstrate compliance with allowable mass emission rate(s) for particulates: Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, burning on-spec oil and using virgin materials, unless otherwise specified or approved by the Central District Office. If required, emission testing will be run when operating with natural gas and/or number 2 fuel.

- b. Emission Limitation:
PE emissions from burning on-spec used oil, natural gas or number 2 fuel shall not exceed 8.40 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance shall be determined by calculation using the lb PM per ton of asphalt produced, as determined from emission testing, multiplied by the tons of asphalt produced per rolling 12 month period, divided by 2000 lb/ton.

- c. Emission Limitation:
Sulfur dioxide (SO₂) emissions from burning on-spec used oil shall not exceed 26.0 lbs/hr.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 120 days after initial startup of the emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for SO₂.
- iii. The following test method(s) shall be employed to demonstrate compliance with allowable mass emission rates(s) for SO₂: Method 6 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- iv. The test(s) shall be conducted while the emissions unit is operating at or near its

maximum capacity, burning on-spec oil and using recycle product, unless otherwise specified or approved by the Central District Office.

- d. Emission Limitation:
SO₂ emissions from burning number 2 fuel or natural gas shall not exceed 26.0 lbs/hr.
- Applicable Compliance Method:
Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.10 pounds SO₂ per ton of asphalt (application, 02/21/01) by the maximum capacity of the emission unit (260 tons/hour).
- If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for SO₂: Method 6 of 40 CFR Part 60. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.
- e. Emission Limitation:
SO₂ emissions from burning on-spec used oil shall not exceed 20.0 tons per rolling 12 month period.
- Applicable Compliance Method:
Compliance with this emission limitation shall be demonstrated by multiplying the lbs SO₂ / ton of asphalt produced, as determined from emissions testing, by the amount of asphalt produced from burning on-spec used oil per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the other fuel types.
- f. Emission Limitation:
SO₂ emissions from burning natural gas or number 2 fuel shall not exceed 20.0 tons per rolling 12 month period.
- Applicable Compliance Method:
Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.10 pounds of SO₂ per ton of asphalt produced (application, 2/21/01) and multiplying by the tons of asphalt produced from burning natural gas and number 2 fuel per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the on-spec used oil.
- g. Emissions Limitation:
Volatile organic compound (VOC) emissions from burning used oil shall not exceed 13.0 lbs/hour.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 120 days after initial startup of the emissions unit.
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC.
 - iii. The following test method(s) shall be employed to demonstrate compliance with allowable mass emission rate(s) for VOC: Method 25 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, burning on-spec oil and using recycle product, unless otherwise specified or approved by the Central District Office.
- h. **Emissions Limitation:**
VOC emissions from burning number 2 fuel or natural gas shall not exceed 13.0 lbs/hour.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.050 pound per ton of asphalt (application, 02/21/01) by the maximum capacity of the emission unit (260 tons/hour).

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 25 of 40 CFR Part 60. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

- i. **Emission Limitation:**
VOC emissions from burning on-spec used oil shall not exceed 10.0 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by calculation using the lb VOC/ ton of asphalt produced, as determined from emissions testing, multiplied by the tons of asphalt produced from burning on-spec used oil per rolling 12 month period, divided by 2000 lb/ton. This figure

will be added to the value calculated from burning the other fuel types.

- j. Emission Limitation:
VOC emissions from burning natural gas or number 2 fuel shall not exceed 10.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.050 pounds of VOC per ton of asphalt produced (application, 2/21/01) and multiplying by the tons of asphalt produced from burning natural gas and number 2 fuel per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the on-spec used oil.

- k. Emission Limitation:
Carbon monoxide (CO) emissions from burning on-spec used oil and natural gas shall not exceed 117 lbs/hour.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 120 days after initial startup of the emissions unit.
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for CO.
 - iii. The following test method(s) shall be employed to demonstrate compliance with allowable mass emission rates(s) for CO: Method 10 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, burning on-spec oil, natural gas and using recycle product, unless otherwise specified or approved by the Central District Office.
- l. Emission Limitation:
Carbon monoxide (CO) emissions from burning number 2 fuel shall not exceed 117 lbs/hour.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.45 pounds per ton of asphalt (application, 02/21/01) by the maximum capacity of the emission unit (260 tons/hour).

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for CO: Method 10 of 40 CFR Part 60. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

- m. Emission Limitation:
CO emissions from burning on-spec used oil shall not exceed 90.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance shall be determined by calculation using the lb CO/ton of asphalt produced, as determined from emissions testing, multiplied by the tons of asphalt produced from burning on-spec used oil per rolling 12 month period, divided by 2000 lb/ton. This figure will be added to the value calculated from burning the other fuel types.

- n. Emission Limitation:
CO emissions from burning number 2 fuel shall not exceed 90.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.45 pounds of CO per ton of asphalt produced (application, 2/21/01) and multiplying by the tons of asphalt produced from burning number 2 fuel per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the other fuel types.

- o. Emissions Limitations:
CO emissions from burning natural gas shall not exceed 90.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emissions limitation for CO shall be determined by calculation using the lb CO/ton of asphalt produced, as determined from emissions testing, multiplied by the tons of asphalt produced from burning natural gas per 12 month rolling period, divided by 2000 lb/ton. This figure will be added to the value calculated from burning the other fuel types.

- p. Emissions Limitation:
Nitrogen oxide (NO_x) emissions from burning on-spec used oil and natural gas oil shall not exceed 31.2 lbs/hr.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 120 days after initial startup of the emissions unit.
 - ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO_x.
 - iii. The following test method(s) shall be employed to demonstrate compliance with allowable mass emission rates(s) for NO_x: Method 7 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, burning on-spec used oil and natural gas and using recycle product, unless otherwise specified or approved by the Central District Office.
- q. Emission Limitation:
NO_x emissions from burning number 2 fuel shall not exceed 31.2 lbs/hr.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated by multiplying the emission factor of 0.12 pounds per ton of asphalt (AP-42, 12/00) by the maximum capacity of the emission unit (260 tons/hour).

If required, the following test method shall be employed to demonstrate compliance with the allowable mass emission rate for NO_x: Method 7 of 40 CFR Part 60. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

r. Emissions Limitation:

NO_x emissions from burning on-spec used oil shall not exceed 24.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance shall be determined by calculation using the lb NO_x/ton of asphalt produced, as determined from emissions testing, multiplied by the tons of asphalt produced from burning on-spec used oil per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the other fuel types.

s. Emissions Limitation:

NO_x emissions from burning number 2 fuel shall not exceed 24.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with the emissions limitation for NO_x shall be determined by using the emission factor of 0.12 pounds of NO_x per ton of asphalt produced (AP-42, 12/00) and multiplying by the tons of asphalt produced from burning number 2 fuel per rolling 12 month period, divided by 2000 lbs/ton. This figure will be added to the value calculated from burning the other fuel types.

t. Emissions Limitation:

NO_x emissions from burning natural gas shall not exceed 24.0 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with this emissions limitation for NO_x shall be determined by calculation using the lb NO_x /ton of asphalt produced, as determined from emissions testing, multiplied by the tons of asphalt produced from burning natural gas per rolling 12 month period, divided by 2000 lb/ton. This figure will be added to the value calculated from burning the other

fuel types.

- u. Emissions Limitations:
Arsenic, cadmium, chromium and lead emissions are limited by the fuel specifications in A.2.c.

Applicable Compliance Method:

Compliance with the emissions limitation for arsenic, cadmium and lead shall be demonstrated by the monitoring and recordkeeping in Section C.1. of this permit.

- v. Emissions Limitations:
Visible particulate emissions from the stack shall not exceed 20% opacity as a three minute average.

Applicable Compliance Method:

Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A, as such appendix existed on July 1, 1996 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- w. Emission Limitation:
No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens and weigh hopper.

Applicable Compliance Method:

Compliance with the limitations on visible emissions of fugitive dust found in Section A.1 of this permit shall be demonstrated by the monitoring and recordkeeping in Section C.4.

- x. Emission Limitation:
Visible emissions of fugitive dust shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A, as such appendix existed on July 1, 1996 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

2. 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).

F. Miscellaneous Requirements

1. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
P901	260 tph batch hot mix asphalt plant	Subpart I

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
3232 Alum Creek Drive
Columbus, OH 43207

2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound 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

Shelly Materials Plant 63
PTI Application: 01-09276
Issued

Facility ID: 0145020323

Emissions Unit ID: **P901**

permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

3. The terms and conditions contained within this PTI shall supersede the terms and conditions previously contained in PTI 01-04220 issued on November 10, 1993 for emission unit P001.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08326 Facility ID: 0145020323

FACILITY NAME Shelly Materials Plant 63

FACILITY DESCRIPTION 260 TPH asphalt batch plant CITY/TWP Newark

SIC CODE 2951 SCC CODE 30500205 EMISSIONS UNIT ID P901

EMISSIONS UNIT DESCRIPTION 260 ton per hour asphalt batch plant fired with number 2 fuel, natural gas or on specification used oil (Chapter 31 modification to PTI 01-04220 issued on November 10, 1993).

DATE INSTALLED

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		10.92	8.4	10.92	8.4
PM ₁₀					
Sulfur Dioxide		26.0	20.0	26.0	20.0
Organic Compounds		13.0	10.0	13.0	10.0
Nitrogen Oxides		31.2	24.0	31.2	24.0
Carbon Monoxide		117	90	117	90
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? **Subpart I**

NESHAP?

PSD?

OFFSET POLICY?

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

See additional terms and conditions

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$ N/A

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*? YES NO

IDENTIFY THE AIR CONTAMINANTS: N/A

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

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	Electronic	<u>Additional information</u> File Name Convention (your PTI # plus this letter)	Hard Copy	None
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

NEW SOURCE REVIEW FORM B

PTI Number: 01-08326 Facility ID: 0145020323

FACILITY NAME Shelly Materials Plant 63

FACILITY DESCRIPTION 260 TPH asphalt batch plant CITY/TWP Newark

BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" 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 Materials operates a 260 ton per hour batch hot mix asphalt plant with a baghouse in Newark, OH (Non appendix A area). They have submitted a permit to install (PTI) to burn on-spec used oil and natural gas. They are currently permitted to burn fuel oil. The potential emissions of sulfur dioxide (SO₂), nitrogen oxide (NO_x) and carbon monoxide (CO) when burning each type of fuel exceed Title V thresholds so they have requested a Synthetic Minor PTI. The permit has a cumulative 12-month limitation on production. A 12-month operating table was not necessary because the facility has documentation of their production rates for the past two years.

The increase in emissions from this emission unit does not trigger Ohio Modeling significant emission limits. The emissions of this facility are not subject to the Ohio Air Toxics Policy.

Applicable rules include 3745-31-05, 3745-17-07(A), 3745-17-11, 3745-18-06 and NSPS Subpart I.

Calculations for on-spec used oil, number 2 fuel oil and natural gas are below. The emission factor for each pollutant is the same regardless of the fuel being burned.

PE emission factor: 0.042 lb/ton (AP-42, Table 11.1-1, 12/2000)

PE hourly emissions: 260 ton/hr * 0.042 lb/ton = 10.92 lbs/hr

PE potential to emit: 10.92 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 47.83 tons/yr

PE proposed actual emissions: 0.042 lb/ton * 400,000 tons/yr * 0.0005 tons/lb = 8.4 tons/yr

CO emission factor: 0.45 lb/ton(application, 2/21/2001)

CO hourly emissions: 260 tons/hr * 0.45 lbs/ton = 117 lbs/hr

CO potential to emit: 117 lbs/hr * 8760 hrs/yr * 0.0005 tons/lb = 512 tons/yr

CO proposed actual emissions: 0.45 lb/ton * 400,000 tons/yr * 0.0005 tons/lb = 90 tons/yr

SO₂ emission factor: 0.10 lb/ton (application, 2/21/20001)

SO₂ hourly emissions: 0.10 lb/ton * 260 tons/hr = 26 lbs/hr

SO₂ potential to emit: 26 lbs/hr * 8760 hr/yr * 0.0005 tons/yr = 113.88 tons/yr

SO₂ proposed actual emissions: 0.10 lb/ton * 400,000 tons/yr * 0.0005 tons/lb = 20 tons/yr

NO_x emission factor: 0.12 lb/ton (AP-42, Table 11.1-5, 12/00)

NO_x hourly emissions: 0.12 lb/ton * 260 tons/hr = 31.2 lbs/hr

NO_x potential to emit: 31.2 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 136.66 tons/yr

NO_x proposed actual emissions: 0.12 lb/ton * 400,000 tons/yr * 0.0005 tons/lb = 24 tons/yr

VOC emission factor: 0.050 lb/ton (application, 2/21/2001)

VOC hourly emissions: 0.050 lb/ton * 260 tons/hr = 13 lbs/hr

NEW SOURCE REVIEW FORM B

PTI Number: 01-08326 Facility ID: 0145020323

FACILITY NAME Shelly Materials Plant 63

FACILITY DESCRIPTION 260 TPH asphalt batch plant CITY/TWP Newark

VOC potential to emit: 13 lbs/hr * 8760 hrs/yr * 0.0005 tons/lb = 56.94 tons/yr

VOC proposed actual emissions: 0.05 lb/ton * 400,000 tons/yr * 0.0005 tons/lb = 10.0 tons/yr

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

Shelly Materials has submitted a PTI to burn used on-spec oil, natural gas and number 2 fuel in its 260 ton per hour batch hot mix asphalt plant located in Newark, OH. The facility will have the ability to use reclaimed asphalt pavement (RAP).

Based on the hourly maximum capacity of the asphalt plant and assuming it operates 8760 hours per year, the facility would exceed Title V thresholds for CO, SO₂ and NO_x.

B. Facility Emissions and Attainment Status

The facility has a potential to emit as follows:

P001	Emissions	Pre-synthetic minor (tons)	Post-synthetic minor (tons)
	PE	47.83	8.40
	SO ₂	113.88	20.0
	NO _x	136.66	24.0
	VOC	56.94	10.0
	CO	512.46	90

C. Source Emissions

The pre-synthetic minor emissions assume that the facility operates at its maximum hourly capacity every hour of the year. The post-synthetic minor emissions assume that the production rate is limited to 400,000 tons per rolling 12 month period.

D. Conclusion

This synthetic minor will effectively restrict the CO, NO_x, and SO₂ emissions below Title V thresholds by limiting the production rate to 400,000 tons per rolling 12-month period. The operational restrictions, record keeping, reporting and testing requirements shall ensure that compliance with this permit is achieved and maintained.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08326 Facility ID: 0145020323

FACILITY NAME Shelly Materials Plant 63

FACILITY DESCRIPTION 260 TPH asphalt batch plant CITY/TWP Newark

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>
PE	8.4
CO	90.0
SO ₂	20.0
NO _x	24.0
VOC	10.0