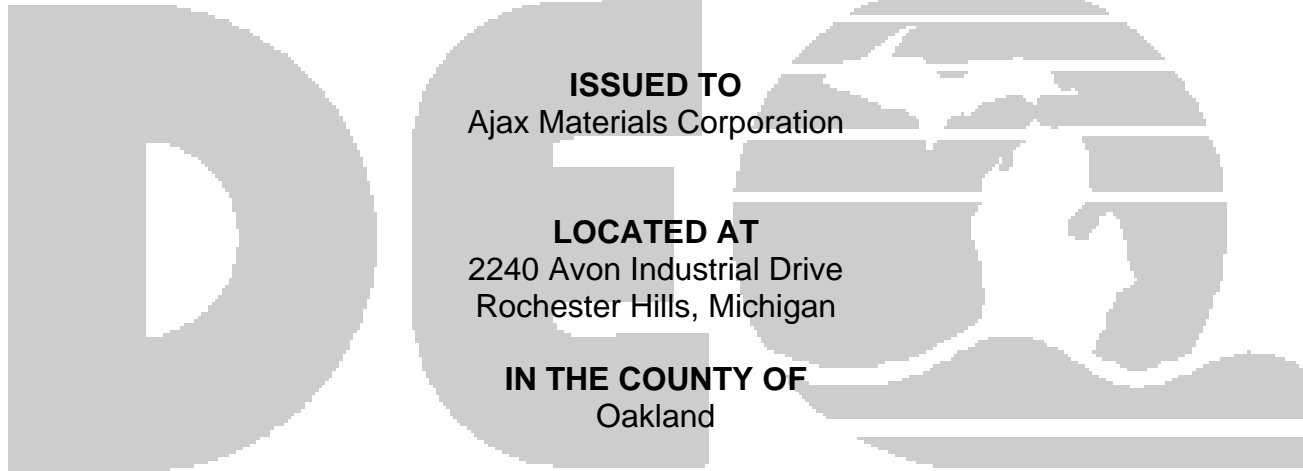


**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

May 20, 2005

**NEW SOURCE REVIEW PERMIT TO INSTALL  
720-89D**



**ISSUED TO**  
Ajax Materials Corporation

**LOCATED AT**  
2240 Avon Industrial Drive  
Rochester Hills, Michigan

**IN THE COUNTY OF**  
Oakland

**STATE REGISTRATION NUMBER**  
B4137

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: <b>April 21, 2005</b>	
DATE PERMIT TO INSTALL APPROVED: <b>May 20, 2005</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**

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**Alphabetical Listing of Common Abbreviations/Acronyms used in this Permit to Install.**

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	Btu	British thermal unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
GACS	Gallon of Applied Coating Solids	hr	Hour
GC	General Condition	H <sub>2</sub> S	Hydrogen sulfide
HMA	Hot Mix Asphalt		
HAP	Hazardous Air Pollutant	hp	Horsepower
HVLP	High Volume Low Pressure *	lb	Pound
ID	Identification	m	Meter
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NO <sub>x</sub>	Oxides of nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM-10	Particulate matter less than 10 microns aerodynamic diameter
NSPS	New Source Performance Standards	pph	Pound per hour
NSR	New Source Review	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO <sub>2</sub>	Sulfur dioxide
SRN	State Registration Number	THC	Total hydrocarbons
TAC	Toxic Air Contaminant	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		VOC	Volatile organic compounds
		yr	Year

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **[R336.1201(1)]**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **[R336.1201(4)]**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **[R336.1201(6)(b)]**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **[R336.1201(8), Section 5510 of Act 451, PA 1994]**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[R336.1219]**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **[R336.1901]**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **[R336.1912]**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. **[R336.1301]**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this permit to install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R336.1370(2). **[R336.1370]**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

**SPECIAL CONDITIONS**

**Emission Unit Identification**

<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Stack Identification</b>
EU-001	One hot mix asphalt facility, consisting of aggregate conveyors and a 400 tons per hour counterflow drum mixer, capable of combusting natural gas, #2 and #6 fuel oil, and recycled used oil, controlled by a baghouse with a rated airflow capacity of 90,000 actual cubic feet per minute.	SV-001
EU-ACTANKS	Four liquid asphalt cement storage tanks.	
EU-SILOS	Five 200 ton capacity asphalt paving materials finished product storage silos.	
EU-YARD	Fugitive dust sources associated with the hot mix asphalt facility, consisting of all plant roadways, the plant yard, all material storage piles, and all material handling operations except cold feed aggregate bins.	fugitive emissions
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.		

**Flexible Group Identification**

<b>Flexible Group ID</b>	<b>Emission Units Included in Flexible Group</b>
FG-FACILITY	All equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.

**The following conditions apply to : EU-001**

**Emission Limits**

	<b>Pollutant</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirement</b>
1.1a	PM	0.04 gr/dscf	Test Protocol <sup>3</sup>	GC 14	40 CFR§60.92(a)(1)
1.1b	SO <sub>2</sub>	0.263 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1205(3)
1.1c	SO <sub>2</sub>	89.4 tpy <sup>1</sup>	12 month rolling time period as determined at the end of each calendar month.	GC 14	R 336.1205(3)
1.1d	NO <sub>x</sub>	0.12 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1205(3)
1.1e	CO	0.201 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1205(3)
1.1f	CO	68.3 tpy <sup>1</sup>	12 month rolling time period as determined at the end of each calendar month.	GC 14	R 336.1205(3)
1.1g	VOC	0.058 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1205(3)
1.1h	Lead	1.5E-05 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1205(3)

	<b>Pollutant</b>	<b>Limit</b>	<b>Time Period</b>	<b>Testing/ Monitoring Method</b>	<b>Applicable Requirement</b>
1.1i	Benzene	0.0012 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1j	Toluene	0.0029 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1k	Ethylbenzene	0.0012 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1l	Xylene	0.0012 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1m	Naphthalene	0.00065 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1n	Formaldehyde	0.0036 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1o	Acrolein	5.0E-04 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1p	Arsenic	1.1E-06 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1q	Nickel	6.3E-05 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1r	Manganese	1.4E-04 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1s	Sulfuric Acid	6.26E-03 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225
1.1t	Hydrogen Chloride	0.006 lb/ton <sup>2</sup>	Test Protocol <sup>3</sup>	GC 14	R 336.1225

<sup>1</sup> Annual limits based on 680,000 tons HMA paving material production.

<sup>2</sup> Pound pollutant per ton of HMA paving material produced.

<sup>3</sup> Test protocol shall describe averaging times.

#### Material Usage Limits

- 1.2 Permittee shall limit the asphalt mixture in EU-001 to a maximum of 50 percent reclaimed asphalt pavement (RAP) material based on a monthly average. [R 336.1901]
- 1.3 Permittee shall limit the activated tire rubber (ATR) content of the liquid asphalt cement used in EU-001 to a maximum of 15 percent by weight ATR material. [R 336.1901]
- 1.4 Permittee shall not use as a raw material in EU-001 any asbestos tailing or asbestos containing waste materials. [40 CFR, Part 61, Subpart M]

#### Process/Operational Limits

- 1.5 The permittee shall not process more than 680,000 tons of HMA paving materials in EU-001 per 12-month rolling time period as determined at the end of each calendar month. [R 336.1205(1)(a), R 336.1205(3)]
- 1.6 The permittee shall not process more than 400 tons of HMA paving materials in EU-001 per hour based on a 24-hour rolling time period as determined at the end of each hour. [R 336.1224, R 336.1225, R 336.1702]
- 1.7 Permittee shall not burn in EU-001 any hazardous waste (as defined in state or federal law), any blended fuel oil or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point or ash content varies from the standards specified in the following table. [R 336.1201(3) and R 336.1225]

<u>Contaminant</u>	<u>Maximum Concentration Parts per million by weight</u>
Arsenic	5.0
Cadmium	2.0
Chromium	10.0
Lead	100.0
PCBs	1.0
Total Halogens	4000.0
Sulfur	1.5 % by weight
Minimum Flash Point	100 degrees F
Maximum Ash Content	1.0 % by weight

- 1.8 Except as provided in Special Condition No. 1.23 of this Permit to Install, permittee shall not operate EU-001 unless the Compliance Monitoring Plan for RUO (CMP) attached as Appendix B has been implemented by the permittee. All records required by the CMP shall be kept on file for a period of at least five years and made available to Air Quality Division upon request. **[R 336.1201(3) and R 336.1225]**

#### **Equipment**

- 1.9 Permittee shall equip and maintain EU-001 with a fabric filter collector (baghouse). Maintenance records consistent with the Preventative Maintenance Program for the Baghouse attached as Appendix A shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. **[R 336.1910 and R 336.1911]**
- 1.10 Permittee shall equip and maintain the EU-001 baghouse with instrumentation to indicate the pressure drop across the fabric filters. **[R 336.1910]**
- 1.11 Permittee shall not operate EU-001 unless the fabric filter collector (baghouse) is installed and operating properly as described in the Preventative Maintenance Program (Appendix A). **[R 336.1910]**

#### **Testing**

- 1.12 Verification and quantification of odor emission rates from EU-001 by testing, at owner's expense, in accordance with Department requirements, may be required for continued operation. Verification of emission rates includes the submittal of a complete report of the test results within not more than 120 days of the written notification requirement for such verification. If requested, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method must be submitted to the Air Quality Division. The stack sampling plan shall include provisions for various fuel usage, plant operating conditions, and odor neutralizer system operation (if any). The plan must be approved by the Air Quality Division prior to testing. **[R 336.1901, R 336.2001, R 336.2003, and R 336.2004]**
- 1.13 Verification and quantification of emission rates from EU-001 of the hazardous air pollutants listed below by testing, at owner's expense, in accordance with Department requirements, may be required for continued operation. Verification of emission rates includes the submittal of a complete report of the test results. A complete test plan must be submitted to the Air Quality Division. The test plan shall include a provision for monitoring the CO emissions during the test. The plan must be approved by the Air Quality Division prior to testing. **[R 336.1225, R 336.2001, R 336.2003, and R 336.2004]**



<b>Hazardous Air Pollutants</b>
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benzene, toluene, ethylbenzene, xylene, naphthalene, formaldehyde, acrolein, arsenic, nickel, manganese, lead
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- 1.14 Verification and quantification of emission rates from EU-001 of carbon monoxide, sulfur dioxide, and sulfuric acid by testing, at owner's expense, in accordance with Department requirements, may be required for continued operation. Verification of emission rates includes the submittal of a complete report of the test results. A complete test plan must be submitted to the Air Quality Division. The plan must be approved by the Air Quality Division prior to testing. [R 336.1205(3), R 336.2001, R 336.2003, and R 336.2004]

### Monitoring

- 1.15 The permittee shall monitor, in a satisfactory manner, the ATR content of the liquid asphalt cement, the virgin aggregate feed rate and the RAP feed rate to EU-001 on a continuous basis. [R 336.1224, R 336.1225, R 336.1702]

- 1.16 The permittee shall monitor, with a handheld CO monitor, the CO emissions from EU-001 and the production data associated with the time the emissions data were collected. One data set shall be recorded for each of the following occurrences:

- a) Upon start-up of each paving season.
- b) Upon a malfunction of the drum dryer/mixer or its associated burner.
- c) After every 500 hours of operation.

A data set shall consist of at least eight separate CO readings and shall be taken over a total time period of thirty minutes or longer. Any request for an alternate monitoring schedule shall be submitted in writing to the AQD District Supervisor for review and approval. Data collected by this method shall be used for determining proper burner operation. [R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702, R 336.1901]

- 1.17 The permittee shall monitor emissions and operating information for EU-001 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and I. [40 CFR Part 60 Subparts A & I]

- 1.18 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor, by observation, the pressure drop across the fabric filter dust collector in EU-001 once per day. The device shall be certified by the manufacturer to be accurate within  $\pm 2$  inches water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. [R 336.1331, R 336.1901]

- 1.19 The permittee shall monitor, in a satisfactory manner, the fuel usage rate for EU-001 on a daily basis in gallons or cubic feet per day. [R 336.1205(1)(a), R 336.1205(3), R 336.1225, R 336.1402]

### Recordkeeping/Reporting/Notification

- 1.20 The following data shall be kept on file for a period of at least five years from the time the data were collected and made available to the AQD upon request:

- a) All CO and related production data required by SC 1.16, including the dates and times emissions were monitored.
- b) All calculations required by SC 1.16. [R 336.1205 and R 336.1901]

- 1.21 Except as provided in Special Condition No. 1.23 of this Permit to Install, permittee shall obtain a copy of the (waste oil, reprocessed oil, reused or used oil, RUO etc.) analysis from the fuel supplier for each shipment of blended fuel oil or RUO used as fuel in EU-001. The analysis shall include analyses of blended fuel oil's or RUO's content of arsenic, cadmium, chromium, lead, PCBs, and total halogens (all in units of parts per million by weight), sulfur (percent by weight), specific gravity, and higher heating value (Btu/pound). The analyses shall report the detection limit for each component analyzed. This information shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1201(3) and R 336.1225]**
- 1.22 Except as provided in Special Condition No. 1.23 of this Permit to Install, complete copies of all EU-001 fuel oil or RUO certification(s) as supplied by the fuel oil supplier and all fuel or RUO oil sampling analytical results obtained by the permittee, including QA/QC data, shall be kept on file for a period of at least five years and made available to AQD upon request. **[R 336.1201(3) and R 336.1225]**
- 1.23 For each shipment of blended fuel oil or RUO used as fuel in EU-001 received from the Angelo's Asphalt Materials, Inc. oil storage terminal located in the City of River Rouge, permittee may use oil analysis reports maintained by the River Rouge terminal, provided that the reports meet the following requirements: The River Rouge terminal shall obtain a copy of the (waste oil, reprocessed oil, reused or used oil, RUO etc.) analysis from the fuel supplier for each shipment of blended fuel oil or RUO received at the River Rouge terminal. The analysis shall include analyses of blended fuel oil's or RUO's content of arsenic, cadmium, chromium, lead, PCBs, and total halogens (all in units of parts per million by weight), sulfur (percent by weight), specific gravity, and higher heating value (Btu/pound). The analyses shall report the detection limit for each component analyzed. This information shall be kept on file at the River Rouge terminal for a period of at least five years and made available to the AQD upon request. **[R 336.1201(3) and R 336.1225]**
- 1.24 Permittee shall keep records of the following production information for EU-001 on the basis indicated for each item:
- The virgin aggregate feed rate (hourly basis).
  - The RAP feed rate (hourly basis).
  - Information sufficient to identify all components of the liquid asphalt cement and additives (hourly basis).
  - The asphalt paving material product temperature (intermittent basis).
- Upon start-up, the initial mix design and time shall be recorded. When a new mix design is activated after start-up, the time and new mix design shall be recorded. Product quality control data may be used for item d). Records sufficient to identify routine process changes shall be kept on file until the end of the paving season in which they were recorded and made available to the AQD upon request. **[R 336.1901]**
- 1.25 Permittee shall keep records of the following items for each calendar day that EU-001 is operated. These records shall be kept on file for a period of at least five years and made available to the AQD upon request. **[R 336.1201(3)]**
- The identification, type, and amounts (in gallons or cubic feet) of all fuels combusted.
  - Tons of virgin hot mix asphalt produced.
  - Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.
  - Total hours of operation.
  - The quantity of RAP used in hot mix asphalt paving materials each calendar month.
  - The sulfur content of each load of fuel oil delivered to the hot mix asphalt facility.
  - The total amount of asphalt paving materials processed.
  - The ATR content (in percent by weight) of the liquid asphalt cement used.

- 1.26 Permittee shall calculate the actual emission levels for CO, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and particulate matter from EU-001 based on the most recent calendar year. If stack test results for the permitted hot mix asphalt facility exist for any of the aforementioned pollutants, those stack test results may be used to estimate

pollutant emissions subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in SC 1.1a through SC 1.1g shall be used to estimate the emissions of a pollutant. These data shall be kept on file for a period of at least five years and made available to the AQD upon request. [R 336.1205]

**Stack/Vent Restrictions**

	<b>Stack &amp; Vent ID</b>	<b>Maximum Dimensions (inches)</b>	<b>Minimum Height Above Ground Level (feet)</b>	<b>Applicable Requirement</b>
1.27	SV-001	60	75	R 336.1225 40 CFR 52.21 (c),(d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

**The following conditions apply to: EU-YARD**

**Process/Operational Limits**

- 2.1 Permittee shall not operate EU-001 unless the Management Plan for the Control of Fugitive Dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix C has been implemented and is maintained. [R 336.1371, R 336.1372, and R 336.1901]

**Recordkeeping/Reporting/Notification**

- 2.2 The permittee shall calculate in a satisfactory manner, the annual fugitive dust emissions of particulate matter. The fugitive dust emissions shall be calculated using the current U. S. EPA Compilation of Air Pollutant Emission Factors (AP-42) or other emission factors approved by the Department such as those used in the MAERS. The actual fugitive dust emission levels for EUYARD shall be reported to the AQD through the annual emission reporting required under Section 5503(k) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. [R 336.1371, R 336.1372, R 336.1901]

**The following conditions apply to: EU-ACTANKS**

**Process/Operational Limits**

- 3.1 Permittee shall not operate EU-001 unless the vapor condensation and recovery system for each liquid asphalt cement storage tank is installed and operating properly. [R 336.1224]

**The following conditions apply to: EUSILOS**

**Process/Operational Limits**

- 4.1 The permittee shall not operate EUSILOS unless all the silo load-out activities occur in an area from which emissions are controlled. Emissions from the truck load-out area shall be vented into the burning zone of EU-001 or controlled by equivalent means. The permittee shall not operate EUSILOS unless the silo load-out control system is installed, maintained and operated in a satisfactory manner. [R 336.1901]

**The following conditions apply to: FG-FACILITY**

**Emission Limits**

- 5.1 The total emission rate from the stationary source, including fugitive emissions, of HAPs shall not exceed 8.9 tons per rolling twelve-month period for each individual HAP nor 22.49 tons per rolling twelve-month period for all HAPs combined. [CAA, Section 112]

**APPENDIX A**

**Preventative Maintenance  
Program for the  
BAGHOUSE**

**at**

Ajax Materials Corporation Plant 3—Rochester Hills, Michigan

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The Preventative Maintenance Program for the Baghouse is for the purpose of keeping the baghouse in good operating condition, and thereby, maintaining the rated capture efficiency of the baghouse for the control of particulate matter. ALL REFERENCES TO VISIBLE EMISSIONS IN THIS DOCUMENT, PARTICULARLY IN SEC. 5, REFER SPECIFICALLY TO VISIBLE EMISSIONS CAUSED BY A DUST (PARTICULATE) EMISSION.

**1. BAGHOUSE OPERATING PRESSURE DROP.**

- a. The pressure drop across the baghouse shall be continuously measured. The minimum pressure drop shall not be less than 2 inches, water gauge, except when a large number of filter bags have been replaced and the maximum pressure drop shall not be greater than 8 inches, water gauge.
- b. The pressure drop across the baghouse shall be recorded at least once per day and made available to the Air Quality Division upon request.

**2. BAGHOUSE/PLANT ALARM SYSTEM.**

The baghouse shall be equipped with a high temperature sensor and alarm system. The alarm system shall be designed to set off an alarm when the high temperature set-point has been violated, and, to begin a sequential shut-down of the plant if the situation is not resolved within a very short period of time after the alarm sounds.

**3. HANDLING AND STORAGE OF BAGHOUSE DUST.**

Accumulated baghouse dust (particulate) shall be stored and/or be disposed of in a manner which minimizes the introduction of the air contaminants to the outer air.

**4. PIPING AND SEALS MAINTENANCE.**

Piping and seals shall be replaced as needed.

**5. VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN IN THE EVENT OF.**

In the event visible emissions, which appear to exceed the standard allowed in General Condition No. 11 of this Permit to Install, are observed at the discharge point of the stack, the following actions shall be taken:

If no certified visible emissions reader can be on-site within 60 minutes of observing the visible emission to verify the emission density, operations shall be ceased immediately and the cause of the visible emissions determined and corrected prior to operating the plant again.

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**REMINDER:** If the visible emissions continue for more than 2 hours, in excess of an emission standard, an excess emissions report must be made to MDEQ.

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**6. BLACK LIGHT INSPECTIONS.**

A black light test shall be conducted at least once per year--before operations begin for a paving season. Black light inspection equipment and materials shall be available for use at the facility and used as needed during the paving season.

**7. INVENTORY OF FILTER BAGS.**

A minimum of 15 filter bags shall be kept on-site at all times. An inventory of other replacement parts for the baghouse shall be maintained at all times.

**8. BAGHOUSE INSPECTION RECORD.**

A written record of the following shall be maintained by the owner or operator of the facility and made available to the Air Quality Division upon request:

- Visual inspections of the interior components of the baghouse, including date, time, and findings;
- Black light inspections, including date, time, and findings;
- Number of filter bags installed as a result of each inspection to replace filter bags already in use in the baghouse, including date, time, location, and whether the replacement filter bag was brand new or a cleaned, previously used filter bag;
- An explanation (i.e., a description of the damage found) for each filter bag removed from the baghouse and confirmation that another filter bag was installed to replace it;
- Each observation of visible emissions at the stack discharge point and description of response to the observed visible emission, including date and time of visible emission occurrence and results of EPA Method 9 observation, if any. A visible emission record sheet will be made available.
- All significant maintenance activities performed on the baghouse.

**Appendix B**  
**COMPLIANCE MONITORING PLAN (CMP)**  
**FOR FACILITIES BURNING RECYCLED USED OIL (RUO)**

**A. All RUO monitored using this CMP must be acceptable for use as a fuel under federal and state used oil regulations. A certificate of analysis must accompany each delivery and be kept on file.**

Each shipment from the used oil supplier must be accompanied by supplier's documentation demonstrating that the used oil meets specification levels shown in 40 CFR 279.11 and the State of Michigan Department of Environmental Quality Hazardous Waste Management Administrative Rules, Part 111, R 299.9809. The documentation will include supplier certification and analytical data. The analysis will be for the batch of used oil accepted for use as a fuel by the permittee. Separate truckloads may have identical supplier's documentation when they are loaded from a unique batch from a single supplier. A batch is a quantity of used oil, contained in one storage unit (i.e., a tank, tanker truck, barge, etc.) where no additional oil is put into the storage unit after testing. If additional oil is added to a storage unit after testing, a new batch has been created.

The supplier's certificate of analysis shall be reviewed by the permittee to assure that the RUO properties and constituents do not exceed any of the used oil specifications contained in Table 1 of Appendix C prior to acceptance and off-loading of the shipment.

ALLOWABLE LEVELS

Allowable levels for RUO properties and constituents are listed in Table 1.

Table 1

PROPERTY/CONSTITUENT	ALLOWABLE LEVEL
Higher Heating Value	17,000 Btu per pound, minimum
Arsenic	5.0 ppm, maximum
Cadmium	2.0 ppm, maximum
Chromium	10.0 ppm, maximum
Lead	100.0 ppm, maximum
Sulfur	1.5 percent, maximum
Polychlorinated Biphenyls (PCBs)	1.0 ppm, maximum
Total Halogens	4,000 ppm, maximum

Verification: Shipping records for each load received will be maintained a minimum of 5 years.

**B. All RUO deliveries shall be screened for halogens.**

Upon receipt of each RUO fuel shipment and prior to off-loading the RUO fuel, the permittee shall obtain a representative sample according to methods described in the EPA publication SW-846 "Test Methods for Evaluation Solid Waste, Physical/Chemical Methods" and screen the sample for Total Halogens by SW-846 Method 9077.

Verification: Records of the Total Halogens test results will be maintained a minimum of 5 years.

**C. Required Laboratory Analysis**

A split sample of the RUO shall be submitted by the facility to an independent laboratory, in accordance with the frequency described in Section D. of this CMP, to verify the information provided on the supplier's certificate of analysis for the batch. The laboratory analysis shall include the properties and constituents listed in Table 1 of this CMP. A second split sample of the RUO submitted by the facility to an independent laboratory shall be maintained by the facility until the end of the calendar year and shall be made available to the AQD upon request.

Laboratory: Any independent laboratory used by the facility for RUO analysis shall develop a Quality Assurance Plan (QAP). A copy of the QAP shall be submitted by the facility to the AQD, District Office 30 days prior to the use of that laboratory. Detailed in the QAP shall be the QA/QC procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be consistent with the methods identified in the RUO Supplier's Analysis Plan pursuant to 40 CFR 279.55. A list of acceptable QA/QC requirements may be obtained from AQD, Compliance Support Unit in Lansing. The facility shall maintain a copy of the approved QAP on site or at its corporate offices.

**D. Laboratory Analysis Frequency**

The laboratory analysis required in this CMP shall be completed per either Method 1 or Method 2 as applicable.

**Method 1 - Pre-Qualification: For a dedicated tank of RUO, one split sample analysis is required.**

Batch Documentation: For a single batch of RUO, the laboratory analysis will be required once prior to any shipments from that batch being received at the facility. For Method 1 pre-qualification a batch is a quantity of RUO contained in the suppliers storage unit where no additional oil is put into the storage unit after a representative sample has been collected for analysis. If additional oil is added to the storage unit, both a new supplier certificate of analysis and laboratory analysis are necessary.

Upon receipt of a shipment of RUO, the shipping paper shall be reviewed to determine if the RUO originated from a pre-qualified batch. All RUO shipments which are not from a pre-qualified batch are subject to the quarterly sample analysis required pursuant to verification Method 2.

Verification: A list of RUO batches that have been pre-qualified along with a record of both the RUO supplier's and the permittee's analytical data for the same batch will be maintained a minimum of 5 years.

**Method 2 - On-Site Qualification: A random quarterly split sample analysis is required to be selected from all shipments which are not from a pre-qualified batch.**

When RUO that is not pre-qualified by Method 1 is accepted by the permittee, a minimum of one sample per calendar quarter shall be submitted for the required laboratory analysis. The quarterly sample(s) shall be selected from all RUO batches that are not pre-qualified by Method 1 and are accepted by the permittee. Unless an alternative plan is approved by the AQD district supervisor, the time interval between collection of samples shall be a minimum of 45 days.

Verification: A list of all RUO batches accepted and those that have been selected for quarterly sampling along with a record of both the RUO supplier's and the permittee's analytical data for the same batch will be maintained a minimum of 5 years.



## APPENDIX C

# FUGITIVE DUST CONTROL PLAN

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**PURPOSE:** This plan provides dust control strategies for the areas adjacent to and associated with the equipment operations involved in the manufacture of Hot Mix Asphalt (HMA) paving materials.

### 1. SITE MAINTENANCE.

- a. Dust on all areas where vehicular traffic will travel shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method. This will occur a minimum of two times per month or more frequently as dictated by weather conditions and vehicular activity. The dust control method shall be acceptable as determined by the District Supervisor.
- b. The speed of vehicles on the site will be limited to 10 miles per hour (MPH) or less. Signs will be posted to advise drivers of the speed limitation.
- c. Stock piling will be performed in a manner that minimizes freefall drop distance.
- d. Piles will be maintained to minimize fugitive dust. This may include the use of watering, covering and encrusting agents.

### 2. MANAGEMENT OF ON -SITE ROADWAYS.

- a. During the operating season the paved plant roads shall be treated with water, vacuumed, or swept in a manner that minimizes the introduction of the dust to the ambient air to control fugitive dust emissions and track-out dust. This will occur a minimum of two times per month or more frequently as dictated by weather conditions and vehicular activity. The dust control method shall be acceptable as determined by the District Supervisor.
- b. During the operating season, the unpaved travel surfaces shall be treated with water, or other acceptable dust control agents on a frequency sufficient to meet the visible emission opacity standard of 5 percent opacity specified in Michigan Act 451, Section 5524.
- c. Any aggregate spillage on roads shall be removed immediately.

**3. ON-SITE MANAGEMENT OF HAUL VEHICLES.**

- a. **INCOMING TRUCKS:** All trucks entering the site to deliver aggregates will be required to have the loads covered.
- b. **OUT-GOING TRUCKS:** All trucks leaving the site with HMA paving materials will be required to cover their loads prior to leaving the site. A sign shall be posted to advise drivers of this requirement.

**4. MANAGEMENT OF FRONT-END LOADER OPERATIONS.**

The front-end loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hoppers to prevent spillage, and to minimize the drop height of the material when loading the feed hoppers or transferring material to stockpiles.

**5. RECORDKEEPING.**

Records of dust control activities on travel surfaces and other surfaces where fugitive dust emissions occur shall be kept on file and made available to MDEQ staff upon request until the end of the paving season. The records will indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what action was taken.

**6. FUGITIVE EMISSIONS FROM PROCESS EQUIPMENT AND BAGHOUSE.**

Any fugitive emissions from leak(s) and malfunction(s) from any transfer system, storage bin, mixer, hopper, or baghouse shall be immediately corrected to prevent further fugitive emissions.