# MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

December 5, 2022

PERMIT TO INSTALL 894-900

> ISSUED TO Payne & Dolan

# LOCATED AT

5301 Highway M-77 Germfask, Michigan 86013

> IN THE COUNTY OF Schoolcraft

# STATE REGISTRATION NUMBER N2657

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. 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:

# December 5, 2022

DATE PERMIT TO INSTALL APPROVED: December 5, 2022	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

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## **COMMON ACRONYMS**

AQD BACT CAA CAM CEMS CFR COMS Department/department/EGLE EU FG GACS GC GHGs HVLP ID IRSL ITSL LAER MACT MAERS MAP MSDS NA NAAQS NESHAP NSPS NSR PS PSD PTE PTI RACT ROP SC SCR SCR SCR SCR SCR SCR SCR SCR SCR	Air Quality Division Best Available Control Technology Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring System Code of Federal Regulations Continuous Opacity Monitoring System Michigan Department of Environment, Great Lakes, and Energy Emission Unit Flexible Group Gallons of Applied Coating Solids General Condition Greenhouse Gases High Volume Low Pressure* Identification Initial Risk Screening Level Initial Threshold Screening Level Lowest Achievable Emission Rate Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Material Safety Data Sheet Not Applicable National Ambient Air Quality Standards National Emission Standard for Hazardous Air Pollutants New Source Performance Standards New Source Review Performance Specification Prevention of Significant Deterioration Permanent Total Enclosure Permit to Install Reasonable Available Control Technology Renewable Operating Permit Special Condition Selective Catalytic Reduction State Registration Number To Be Determined Toxicity Equivalence Quotient United States Environmental Protection Agency
	United States Environmental Protection Agency Visible Emissions

# POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
Sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
μg	Microgram
μm	Micrometer or Micron
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. (R 336.1201(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 Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(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 Rule 210 (R 336.1210), 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. (R 336.1201(6)(b))
- 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. (R 336.1201(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 Rule 219 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 Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes and Energy. (R 336.1219)
- 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. (R 336.1901)
- 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 condition 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). (R 336.1912)
- 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 Rule 301, 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 Rule 303 (R 336.1303). (R 336.1301)
  - 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 Rule 370(2). (**R 336.1370**)
- The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

#### **EMISSION UNIT SPECIAL CONDITIONS**

#### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
EU001	Hot mix asphalt (HMA) facility including: aggregate conveyors, parallel drum mixer with a capacity of 350 ton per hour, fabric filter dust collector	FGPLANT
EUYARD	Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).	FGPLANT

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 336.1291.

# EU001 EMISSION UNIT CONDITIONS

# DESCRIPTION

Hot mix asphalt (HMA) facility including: aggregate conveyors, parallel drum mixer with a capacity of 350 ton per hour, fabric filter dust collector

Flexible Group ID: FGPLANT

## POLLUTION CONTROL EQUIPMENT

Fabric Filter Dust Collector (Baghouse)

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.04 gr/dscf	Hourly	EU001	SC VI.4	40 CFR 60
					Subparts A & I
2. PM	12.9 pph	Hourly	EU001	SC VI.4, SC VI.8	R 336.1205(3)
3. PM	24.8 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.4, SC VI.8	R 336.1205(3)
4. CO	0.201 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.3, SC VI.7, SC VI.8	R 336.1205(3)
5. CO	70.4 pph	Hourly	EU001	SC VI.8	R 336.1205(3)
6. CO	50.3 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.8	R 336.1205(3)
7. SO <sub>2</sub>	0.16 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1205(3)
8. SO <sub>2</sub>	56 pph	Hourly	EU001	SC VI.8	R 336.1205(3)
9. SO2	40 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.8	R 336.1205(3)
10. NO <sub>x</sub>	0.12 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1205(3)
11. NO <sub>x</sub>	42 pph	Hourly	EU001	SC VI.8	R 336.1205(3)
12. NO <sub>x</sub>	30 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.8	R 336.1205(3)
13. VOC	0.058 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1205(3)
14. VOC	20.3 pph	Hourly	EU001	SC VI.8	R 336.1205(3)
15. VOC	14.5 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.8	R 336.1205(3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
16. Lead	1.5E-5 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1205(3)
17. Lead	5.25E-3 pph	Hourly	EU001	SC VI.5, SC VI.8	R 336.1205(3)
18. Lead	3.75E-3 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.5, SC VI.8	R 336.1205(3)
19. Benzene	633 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
20. Toluene	23,046 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
21. Ethylbenzene	57,616 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
22. Xylene	55,717 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
23. Naphthalene	0.001 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
24. Formaldehyde	7.24E-3 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
25. Acrolein	0.001 lb/ton <sup>b</sup>	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
26. Arsenic	1.3 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
27. Nickel	27 Micrograms per cubic meter of exhaust gas	Hourly	EU001	SC VI.5, SC VI.8	R 336.1225
28. Manganese	9.14E-5 lb/tonb	Hourly	EU001	SC V.2	R 336.1225
29. HCI	1.8 pph	Hourly	EU001	SC VI.8	R 336.1225
30. HCI	2.1 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU001	SC VI.8	R 336.1225
<ul> <li><sup>a</sup> Annual limits based on 500,000 tons HMA paving material production.</li> <li><sup>b</sup> Pound pollutant per ton of HMA paving material produced.</li> </ul>					

#### II. MATERIAL LIMIT(S)

1. The permittee shall not burn in EU001 any hazardous waste (as defined in state or federal law), blended fuel oil or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point, ash content, or acidity vary from the standards specified in the following table. (R 336.1225)

Contaminant	Limit	Units
Arsenic	5.0	ppmw

Contaminant	Limit	Units
Cadmium	2.0	ppmw
Chromium	10.0	ppmw
Lead	100.0	ppmw
PCBs	1.0	ppmw
Total Halogens	4,000.0	ppmw
Sulfur	1.0	Weight %
Minimum Flash Point	100.0	°F
Maximum Ash Content	1.0	Weight %
Acidity	Minimum pH = 4 Maximum pH = 10	N/A

- The permittee shall not use any asbestos tailings or waste materials containing asbestos in EU001 pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M. (40 CFR Part 61 Subparts A & M)
- 3. The permittee shall limit the asphalt mixture processed in EU001 to a maximum of 30 percent RAP material based on a monthly average. (R 336.1225)
- 4. The permittee shall not process more than 500,000 tons of HMA paving materials in EU001 per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205)
- 5. The permittee shall not process more than 350 tons of HMA paving materials in EU001 per hour based on a 24-hour rolling time period as determined at the end of each hour. (R 336.1205)

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU001 unless the Compliance Monitoring Plan (CMP) for Recycled Used Oil (RUO) specified in Appendix C, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. (R 336.1225, R 336.1371, R 336.1372, R 336.1910, R 336.1911, Act 451 324.5521, 40 CFR 279.55)
- The permittee shall maintain the efficiency of the EU001 drum mix burners, to control CO emissions, by fine tuning the burners for proper burner operation and performance. The permittee shall fine tune the burners at the startup of the drum mix fuel burners; upon each paving season; after every 500 hours of operation thereafter or upon a malfunction of EU001 as shown by the CO emission monitoring data, whichever occurs first. (R 336.1205, R 336.1901)
- 3. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all components of the EU001 manufacturing process equipment in proper operating condition at all times. The owner or operator of EU001 shall maintain a log of all significant maintenance activities conducted and all significant repairs made to the manufacturing process equipment. This information shall be kept on file for five years and made available to the Air Quality Division upon request. (R 336.1205)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU001 with a fabric filter collector (baghouse). (R 336.1331, R 336.1910, R 336.1911)

2. The permittee shall equip and maintain the baghouse with instrumentation to indicate the pressure drop across the fabric filters. (R 336.1331, R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- The verification and quantification of odor emissions from EU001, by testing at owner's expense, in accordance with Department requirements may be required for continued operation. Within 60 days upon notification from the AQD District Supervisor, the permittee shall submit to the AQD Technical Programs Unit and District Office, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method. The stack sampling plan shall include provisions for various fuel usages, plant operating conditions, and odor neutralizer system operation (if any). The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 120 days from notification from the AQD District Supervisor. (R 336.1901, R 336.2004)
- 2. Within 60 days after commencement of initial startup in Michigan but before relocating EU001 to any new geographical site or removal of EU001 from Michigan, whichever occurs first, the permittee shall verify and quantify emission rates of manganese from EU001, by testing at owner's expense, in accordance with Department requirements, in order to continue operation. No less than 60 days prior to testing, the permittee shall submit to the AQD Technical Programs Unit and District Office, a complete test plan which shall include an averaging time for manganese and a provision for monitoring CO emissions. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1225, R 336.2001, R 336.2003, R 336.2004)

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a))
- 2. The permittee shall monitor, in a satisfactory manner, the virgin aggregate feed rate and the RAP feed rate to EU001 on a continuous. (R 336.1224, R 336.1225, R 336.1702)
- 3. The permittee shall monitor, with a handheld CO monitor, the CO emissions from EU001 and the production data associated with the time the emissions data were collected. The CO emissions should be less than 500 ppmv to ensure EU001 is operating properly. 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 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 30 minutes or longer. The permittee shall submit any request for an alternate monitoring schedule 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 336.1901)

- 4. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all drum mixer/burner and fabric filter dust collector components of EU001 maintained and operating in a satisfactory manner. The owner or operator shall maintain a log of all significant maintenance activities conducted and all significant repairs made to EU001. Maintenance records for the fabric filter dust collector shall be consistent with the Preventative Maintenance Program specified in Appendix B. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1910, R 336.1911)
- 5. The permittee shall keep the following records for each calendar day that EU001 is operated:

- a) Identification, type and the amounts (in gallons or cubic feet) of all fuel oils combusted.
- b) Sulfur content (percent by weight), specific gravity, and higher heating value (BTU/lb) of all fuel oils being combusted.
- c) Tons of virgin hot mix asphalt produced
- d) Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.
- e) Total hours of operation.
- f) The quantity of RAP used in the hot mix asphalt paving material each calendar month

The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205)

- 6. The permittee shall keep intermittent daily records of the following production information for EU001:
  - a) The virgin aggregate feed rate.
  - b) The RAP feed rate.
  - d) Information sufficient to identify all components of the asphalt paving material mixture.

Upon start-up, the permittee shall record the initial mix design and time. When a new mix design is activated after start-up, the permittee shall record the time and new mix design. The permittee shall keep all records on file until the end of the paving season in which they were recorded and make them available to the Department upon request. (**R 336.1901**)

- 7. The permittee shall keep records, as described in SC VI.3, of all CO emissions and related production data including the dates and times emissions were monitored. This data shall be used to ensure proper operation of the drum dryer or associated burner. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)
- The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period records of the amount of HMA paving materials produced from EU001. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3))
- 9. The permittee shall obtain a copy of the oil analysis from the fuel supplier for each shipment of blended fuel oil or RUO used as fuel in EU001. 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. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225)
- 10. Complete copies of all EU001 fuel oil or RUO certification(s) as supplied by the fuel oil supplier and all fuel oil or RUO oil sampling analytical results obtained by the applicant, including QA/QC data, shall be kept on file for a period of at least five years and made them available to the Department upon request. (R 336.1225)
- 11. Upon the request of the AQD District Supervisor, the permittee shall monitor and record the drum mix temperature and the drum exhaust gas temperature from the hot mix asphalt facility on a continuous basis in a manner and with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (**R 336.1901**)
- 12. The permittee shall keep, maintenance records, consistent with the Preventative Maintenance Program for the Fabric Filter Dust Collector attached as Appendix B. The permittee shall keep all records on file and make them available to the Department upon request.

#### VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU001. (R 336.1201(7)(a)) 2. Written notification of construction and operation is required to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR, Part 60.7. This notification shall be submitted to the District Supervisor, Air Quality Division within the time frames specified in 40 CFR, Part 60.7.

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust	Minimum Height	Underlying
	Diameter / Dimensions	Above Ground	Applicable
	(inches)	(feet)	Requirements
1. SV001	44 x 44	26	R 336.1225, 40 CFR 52.21(c) & (d)

#### IX. OTHER REQUIREMENT(S)

- 1. The permittee shall not relocate EU001 to any new geographical site, under this permit, in Michigan unless all of the following criteria are met:
  - a) EU001 shall not have any outstanding unresolved violations of any of EGLE Air Pollution Control rules, order, or permits; or federal air quality regulations.
  - b) The installation of EU001 at the geographical site shall be of a temporary nature lasting not more than 12 consecutive months.
  - c) The permittee shall provide a notice of intent to relocate along with a proposed site plan to the AQD district office not less than 21 days prior to the scheduled relocation identifying the proposed new geographical site and the probable duration at the new site. The permittee shall clearly identify all residential or commercial establishments and places of public assembly within 1,000 feet of the proposed site of EU001 on the proposed site plan.
  - d) The permittee shall not locate EU001 within 800 feet of a residential or commercial establishment or a place of public assembly unless prior written site approval is obtained from the AQD district office.
  - e) The permittee shall clearly post a copy of this approved permit and permit conditions in the operator's office or workstation and shall post the permit number on the equipment where it is clearly visible from the operator's office or workstation.
  - f) The Department's Delegation of Authority does not authorize us to approve any site where there is a known unresolved objection. Therefore, requests for site approval or location to a new geographical site where there are known unresolved objections will continue to be handled by the Office of the Director of the Michigan Department of Environmental Quality. (R 336.1201)

# EUYARD EMISSION UNIT CONDITIONS

#### DESCRIPTION

Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).

Flexible Group ID: FGPLANT

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUYARD unless the fugitive dust control plan specified in Appendix A has been implemented and is maintained. (R 336.1371, R 336.1372, Act 451 324.5524)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

NA

#### VII. <u>REPORTING</u>

NA

#### VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

NA

# FLEXIBLE GROUP SPECIAL CONDITIONS

#### FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

		Associated
Flexible Group ID	Flexible Group Description	Emission Unit IDs
FGPLANT	Emissions associated with the facility	EU001,
		EUYARD

# FGPLANT FLEXIBLE GROUP CONDITIONS

#### DESCRIPTION

Emissions associated with the facility

Emission Unit: EU001, EUYARD

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. CO	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	ÑA	R 336.1205(3)
2. SO2	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
3. NOx	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
4. VOC	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
5. PM10	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
6. PM2.5	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
7. Each Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)
8. Aggregate HAPs	Less than 22.49 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLANT	NA	R 336.1205(3)

## II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

# V. TESTING/SAMPLING

NA

## VI. MONITORING/RECORDKEEPING

NA

- VII. <u>REPORTING</u>
- NA

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

NA

#### APPENDIX A FUGITIVE DUST CONTROL PLAN

**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 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 prevent fugitive dust. This includes the use of watering, covering and encrusting agents.

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

- a) All the roadways on which the HMA haul vehicles will travel are paved with HMA. This includes the roadway on which the vehicles travel around the process equipment to be loaded with HMA paving materials.
- b) During the operating season, the paved plant roads shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method 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.
- c) During the operating season, the unpaved travel surfaces shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method on a frequency sufficient to meet the visible emission opacity standard of five (5) percent opacity specified in Section 5524 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
- d) 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 EGLE 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. The record shall be maintained in the Operations Log Book.

#### 6. FUGITIVE EMISSIONS FROM PROCESS EQUIPMENT AND FABRIC FILTER DUST COLLECTOR

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

#### **APPENDIX B**

#### PREVENTATIVE MAINTENANCE PROGRAM FOR THE FABRIC FILTER DUST COLLECTOR

The Preventative Maintenance Program for the Fabric Filter Dust Collector is for the purpose of keeping the dust collector in good operating condition, and thereby, maintaining the rated capture efficiency of the dust collector for the control of particulate matter. ALL REFERENCES TO <u>VISIBLE EMISSIONS</u> IN THIS DOCUMENT, PARTICULARLY IN SEC. 5, REFER SPECIFICALLY TO VISIBLE EMISSIONS CAUSED BY A DUST (PARTICULATE) EMISSION.

#### 1. FABRIC FILTER DUST COLLECTOR OPERATING PRESSURE DROP.

- a) The pressure drop across the fabric filter dust collector shall be continuously measured and the minimum pressure drop shall not be less than 2 inches, water gauge, except when a large number of filter bags have been replaced or other reason acceptable to the AQD.
- b) The pressure drop across the fabric filter dust collector shall be recorded at least once per day and kept in a bound notebook. These data shall be recorded in the Daily Operations Log Book.

#### 2. FABRIC FILTER DUST COLLECTOR / PLANT ALARM SYSTEM.

The fabric filter dust collector 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 FABRIC FILTER DUST.

Accumulated fabric filter 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 emissions 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.

**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 EGLE.

#### 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.

An inventory of fabric filter bags shall be maintained by the facility owner or operator so that filter bags will be available to this site within four hours of requesting the filter bags. In addition, a minimum of 15 filter bags shall be kept on-site at all times. An inventory of other replacement parts for the fabric filter dust collector shall be maintained at all times.

#### 8. FABRIC FILTER DUST COLLECTOR INSPECTION RECORD.

A written record in a bound notebook of the following shall be maintained by the owner or operator of the facility:

- Visual inspections of the interior components of the fabric filter dust collector, 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 fabric filter dust collector, 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 fabric filter dust collector 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. Any such visible emission shall be recorded in the Daily Operations Log Book and made available upon request to the AQD.
- All significant maintenance activities performed on the fabric filter dust collector.

#### APPENDIX C COMPLIANCE MONITORING PLAN (CMP) FOR FACILITIES BURNING RECYCLED USED OIL (RUO)

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

Each shipment from the used oil supplier must be accompanied by documentation demonstrating that the used oil meets specification levels in 40 CFR 279.11 (Standards for the Management of Used Oil) and R 299.9809, promulgated pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The documentation shall include supplier certification and analytical data. The analysis must be for the batch of used oil accepted for use as a fuel by the permittee. Separate truckloads may have identical documentation from the supplier if 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., 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 certificate of analysis shall be reviewed by the permittee to ensure that the RUO properties and constituents do not exceed any of the used oil specifications contained in the following table prior to acceptance and off-loading of the shipment.

Property / Constituent	Allowable Level
Higher Heating Value	17,000 Btu per pound (minimum)
Arsenic	5.0 ppmw (maximum)
Cadmium	2.0 ppmw (maximum)
Chromium	10.0 ppmw (maximum)
Lead	100.0 ppmw (maximum)
Sulfur	1.5 percent (maximum)
Polychlorinated Biphenyls (PCBs)	1.0 ppmw (maximum)
Total Halogens	4,000 ppmw (maximum)

#### TABLE 1 - ALLOWABLE LEVELS FOR RUO

Verification: Shipping records for each load received shall 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 EPA publication SW-846 "Test Methods for Evaluation Solid Waste, Physical/Chemical Methods." The sample shall be screened for Total Halogens using SW-846 Method 9077.

**Verification**: Records of the Total Halogens test results shall 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 to verify the information provided on the supplier certificate of analysis for the batch. The laboratory analysis shall include the properties and constituents listed in Table 1. A second split sample shall be maintained by the facility until the end of the calendar year and shall be made available to the AQD upon request.

#### Appendix C – Continued

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 Supervisor 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, Technical Programs Unit. The facility shall maintain a copy of the approved QAP on site or at the corporate offices.

#### D. Laboratory Analysis Frequency

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

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

For a single batch of RUO, the laboratory analysis shall 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 supplier's 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 required to complete the quarterly sample analysis in Method 2.

**Verification:** A list of RUO batches that have been pre-qualified, along with records of the RUO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

# Method 2 - On-Site Qualification: For all shipments which are not a pre-qualified batch, a quarterly split sample analysis is required.

When the permittee accepts RUO that is not pre-qualified by Method 1, 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 accepted by the permittee that are not pre-qualified by Method 1. 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 records of the RUO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.