

ATTACHMENT A

GENERAL CONDITIONS

1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.
2. Operation of any process or process 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)
3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. **(R 336.1207(1)(b))**
4. 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5).
5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.
6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility's facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.
8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.

9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, through the appropriate MiEnviro Portal schedule and/or form, if it is decided not to pursue the installation or construction of the equipment allowed by this general permit to install. **(R 336.1201(4))**
10. Except as provided in subrules (2) and (3) or unless the special conditions of the general permit to install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301(1))**
 - 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 general permit to install.
11. 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 R 336.1370(2). **(R 336.1370)**
12. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**
13. Any required testing protocol shall conform to a format acceptable to the AQD. **(R 336.2003(1))**
14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. **(R 336.2001(4))**
15. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**
16. For a stationary source that becomes a major source, as defined by R336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R 336.1211(1)(a).
17. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R 336.1215(3) or apply for a modification pursuant to R 336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.

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 (Process Equipment & Control Devices)
EUHMAPLANT	Portable hot mix asphalt (HMA) facility including: aggregate conveyors, maximum of 500 tons per hour counter flow drum dryer and mixer, fabric filter dust collector, cold feed aggregate bins.
EUYARD	Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).
EUACTANKS	Liquid asphalt cement storage tank(s) with a total heat capacity of either 5 million of British Thermal Units per hour (MMBtu/hr) for natural gas-fired heaters or 10-gallons/hr for diesel-fired heaters. The AC tanks are controlled with a vapor condensation and recovery system.
EUSILOS	Hot mix asphalt (HMA) paving material product storage silo(s). The top of the silos are controlled with an emission capture system.

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.

The following conditions apply to EUHMAPLANT

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.04 grains per dry standard cubic foot (gr/dscf)	Hourly	EUHMAPLANT	SC V.2, SC VI.4, SC VI.5	40 CFR 60 Subparts A & I
2. PM	0.014 pounds per ton (lb/ton) ^b	Hourly	EUHMAPLANT	SC V.1, SC VI.5	R 336.1205(1)(a), R 336.1205(3)
3. PM10	0.033 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1, SC VI.5	R 336.1205(1)(a), 40 CFR 52.21 (c) & (d)
4. PM10	8.25 tons per year (tpy) ^a	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a) & (3)
5. PM2.5	0.033 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1, SC VI.5	R 336.1205(1)(a), 40 CFR 52.21 (c) & (d)
6. PM2.5	8.25 tpy ^a	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a) & (3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
7. CO	0.13 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(d)
8. SO ₂	0.058 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1205(1)(a), 40 CFR 52.21 (c) & (d)
9. NO _x	0.055 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1205(1)(a), R 336.1205(3),
10. Lead	1.5 x 10 ⁻⁵ lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1225
11. Benzene	0.001 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
12. Toluene	0.006 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
13. Ethylbenzene	0.001 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
14. Xylene	0.001 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
15. Naphthalene	0.001 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
16. Formaldehyde	0.01 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
17. Acrolein	0.001 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
18. Arsenic	1.0x10 ⁻⁶ lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
19. Nickel	1.0x10 ⁻⁴ lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
20. H ₂ SO ₄	0.0032 lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225
21. Manganese	5.0x10 ⁻⁵ lb/ton ^b	Hourly	EUHMAPLANT	SC V.1	R 336.1224, R 336.1225

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
22. Opacity	20%	6-minute average	Any affected facility which is any combination of the following: Drum dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing of mineral filler, systems for mixing HMA; and the loading, transfer, and storage systems associated with emission control systems	SC V.3	40 CFR 60.92

^a Annual limits based on 500,000 tons HMA paving material produced.

^b Pound pollutant per ton of HMA paving material produced.

II. MATERIAL LIMITS

- The permittee shall not burn any fuel other than natural gas, propane, distillate oil, residual oil, blended fuel oil, or recycled used oil (RUO) in EUHMAPLANT. **(R 336.1224, R 336.1225, R 336.1702(a))**
- The permittee shall not burn in EUHMAPLANT 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
Cadmium	2.0	ppmw
Chromium	10.0	ppmw
Lead	100.0	ppmw
PCBs	1.0	ppmw
Total Halogens	1000.0	ppmw
Sulfur	1.5	Weight %
Minimum Flash Point	100.0	°F
Maximum Ash Content	1.0	Weight %
Acidity	Minimum pH = 4 Maximum pH = 10	N/A

3. The permittee shall not use any asbestos tailings or waste materials containing asbestos in EUHMAPLANT pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M. **(R 336.1225, 40 CFR Part 61 Subparts A & M)**
4. The permittee shall limit the asphalt mixture processed in EUHMAPLANT to a maximum of 50 percent recycled asphalt pavement (RAP) material based on a monthly average. **(R 336.1224, R 336.1225, R 336.1702)**
5. The permittee shall not produce more than 500,000 tons of HMA paving materials in EUHMAPLANT per 12-month rolling time period as determined at the end of each calendar month. The 500,000 tons of HMA paving materials is a combination for all locations on a 12-month rolling time period. **(R 336.1205(1)(a), R 336.1205(3))**
6. The permittee shall not produce more than 500 tons of HMA paving materials in EUHMAPLANT per hour based on a daily average. This shall be determined by dividing the daily HMA produced by the daily operating hours. **(R 336.1224, R 336.1225, R 336.1702)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUHMAPLANT unless the Fugitive Dust Control Plan for EUYARD specified in Appendix A has been implemented and is maintained. **(R 336.1371, R 336.1372, Act 451 324.5524)**
2. The permittee shall not operate EUHMAPLANT unless the Preventative Maintenance Program specified in Appendix B has been implemented and is maintained. **(R 336.1910, R 336.1911)**
3. The permittee shall not operate EUHMAPLANT unless the Emission Abatement Plan for Startup, Shutdown and Malfunctions specified in Appendix C has been implemented and is maintained. **(R 336.1911, R 336.1912)**
4. The permittee shall not operate EUHMAPLANT unless the Compliance Monitoring Plan (CMP) for Recycled Used Oil (RUO) specified in Appendix D, 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)**
5. The permittee shall maintain the efficiency of the EUHMAPLANT 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 and after every 500 hours of operation thereafter or upon a malfunction of EUHMAPLANT, whichever occurs first. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUHMAPLANT unless the fabric filter dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the fabric filter dust collector requires a pressure drop range as recommended by the manufacturer in inches of water column. 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 District Supervisor. **(R 336.1910)**

V. TESTING/SAMPLING

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

1. Within 180 days after a request by the Department, the permittee shall verify emission rates for any requested pollutants from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO _x	40 CFR Part 60, Appendix A
SO ₂	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A

Sulfuric Acid Mist	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD through MiEnviro. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. 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)**

2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall verify particulate emission rates from EUHMAPLANT, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and I. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD through MiEnviro. 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. **(40 CFR Part 60 Subparts A & I))**
3. The permittee shall perform a visible emission observation for the counter-flow drum dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing HMA; and the loading, transfer, and storage systems associated with emission control systems at least once a calendar day when EUHMAPLANT is operating during daylight hours, using a method acceptable to the AQD District Supervisor. If the permittee observes visible emissions, the permittee shall do one of the following within 60 minutes of the observation:
 - a) Perform a Method 9 reading for visible emissions. If after performing the Method 9 visible emissions reading, the permittee determines that visible emissions from the observation points exceed 20% opacity, the permittee shall immediately initiate an investigation to determine the cause of the visible emissions and initiate prompt corrective action: or
 - b) Determine the cause of the visible emissions and initiate prompt corrective action.
 - c) Cease operations until the cause of the visible emissions determined and corrected prior to operating the plant again.

Daily records kept will include the time of each visible emissions observation and if visible emissions were observed, identification of the cause, the corrective action taken, and the time of completion of corrective action, a Method 9 reading if performed, the reason if an observation or Method 9 reading is not taken. If the visible emissions continue for more than 2 hours, in excess of an emission standard, per Rule 912 an excess emissions report must be made to the AQD District Supervisor. **(40 CFR 60.92, 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 and record, in a satisfactory manner, the virgin aggregate feed rate and the RAP feed rate to EUHMAPLANT on a continuous basis during operation. Continuous shall be defined in this permit at least one reading every 15 minutes. **(R 336.1224, R 336.1225, R 336.1702)**
3. The permittee shall monitor, with a handheld CO monitor, the CO emissions from EUHMAPLANT, and the production data associated with the time the emissions data were collected. The CO emissions should be less than 500 ppmv to ensure EUHMAPLANT 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 to the AQD District Supervisor through MiEnviro 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(a))**

4. The permittee shall monitor emissions and operating information in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and I for EUHMAPLANT. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available to the Department upon request. **(40 CFR Part 60 Subparts A & I)**
5. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all drum mixer/burner and fabric filter dust collector components for EUHMAPLANT 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 EUHMAPLANT. 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)**
6. The permittee shall keep the following records for each calendar month that EUHMAPLANT is operated:
 - a) Identification, type and the amounts (in gallons) of all fuel oils combusted.
 - b) Identification and the amounts (in standard cubic feet) of natural gas and propane combusted.
 - c) Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (BTU/lb) of all fuel oils being combusted.
 - d) Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.

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 336.1402, R 336.1702(a))**

7. The permittee shall keep daily records of the following production information for EUHMAPLANT:
 - a) The virgin aggregate feed rate.
 - b) The RAP feed rate.
 - c) The asphalt paving material product temperature.
 - d) Information sufficient to identify all components of the asphalt paving material mixture.
 - e) Hours of operation.
 - f) The average production rate of HMA in tons per hour. This is based on the total HMA throughput for the day and hours of operation.

Upon start-up of EUHMAPLANT, 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 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**

8. The permittee shall keep in a satisfactory manner, monthly and 12-month rolling time period emission calculation records of all criteria pollutants and TACs listed in the Emission Limit Table for EUHMAPLANT. If stack test results for EUHMAPLANT exist for any of the pollutants, the permittee may use those stack test results to estimate pollutant emissions subject to the approval of the AQD District Supervisor. In the event that stack test results do not exist for a specific pollutant, the permittee shall use the applicable emission factor listed in the Emission Limit Table to estimate the emissions of a pollutant from EUHMAPLANT. 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 336.1225, R 336.1702(a))**
9. 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(a))**

10. The permittee shall keep, in a satisfactory manner, average daily, monthly and 12-month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT at all sites combined. 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))**
11. The permittee shall maintain a record of the daily pressure drop readings for the fabric filter controlling EUHMAPLANT as required by Appendix B. **(R 336.1224, R 336.1225, R 336.1910)**
12. 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 EUHMAPLANT 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.¹ **(R 336.1901)**
13. The permittee shall keep monthly records of the RAP feed rate, including the average percent of RAP per ton of hot mix asphalt produced containing RAP. **(R 336.1224, R 336.1225, R 336.1702(a))**
14. 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 EUHMAPLANT. 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.¹ **(R 336.1225)**
15. Complete copies of all EUHMAPLANT 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.¹ **(R 336.1225)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this General 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 EUHMAPLANT. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTIONS

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHMAPLANT	68 x 52 or 67 in	30	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall not relocate EUHMAPLANT to any new geographical site in Michigan, under this permit, unless all of the following criteria are met:
 - a) EUHMAPLANT 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 EUHMAPLANT at the geographical site shall be of a temporary nature lasting not more than 24 consecutive months.
 - c) The permittee shall provide a notice of intent to relocate along with a proposed site plan to the AQD through MiEnviro 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 EUHMAPLANT on the proposed site plan.

- d) The permittee shall not locate the stack of EUHMAPLANT 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 general permit and permit conditions in the operator's office or work station and shall post the permit number on the equipment where it is clearly visible from the operator's office or work station.
 - 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 Environment, Great Lake, and Energy. **(R 336.1201, R 336.1225, R 336.1205, R 336.1901, Act 451 324.5505)**
2. The permittee shall not replace or modify EUHMAPLANT unless all of the following conditions are met:
- a) The permittee shall update the general permit by submitting the Air General Permit to Install Modification Application – Portable HMA Plant via MiEnviro Portal, identifying all existing and new or additional equipment added to the process a minimum of 10 days before the replacement, modification or installation of new equipment.
 - b) The permittee shall continue to meet all general Permit to Install applicability criteria after the replacement, modification or installation of new equipment is complete.
 - c) The permittee shall keep records of the date and description of the replacement, modification, or installation of new equipment at the source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.
 - d) The permittee shall notify the Air Quality Division, within 15 days after startup of any new or additional equipment, of the actual date of initial startup. **(R 336.1201a(1))**

The following conditions apply to EUYARD

I. EMISSION LIMITS

- 1. During the operating season, the permittee shall control the emissions from all roads and unpaved travel surfaces by the application of water, sweeping, vacuuming, or other acceptable dust control method on a frequency sufficient to meet the opacity standard of five (5) percent opacity on a continuous basis. **(40 CFR 52.21(c) & (d), Section 5524 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451)**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 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 PARAMETERS

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD, 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 MiEnviro Portal. **(R 336.1371, R 336.1372)**
- 2. The permittee shall maintain a record of all activities required by the fugitive dust plan in Appendix A. **(R 336.1371, R 336.1372)**

3. The permittee shall make available upon request of the AQD District Supervisor, the silt content for each aggregate stored onsite based on the percent by weight passing the #200 sieve. This does not include RAP. **(40 CFR 52.21(c) & (d))**

VII. REPORTING

1. The permittee shall report the actual emission levels for EUYARD 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 (Act 451). **(R 336.1371, R 336.1372)**

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to EUACTANKS

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUACTANKS unless the vapor condensation and recovery system is installed, maintained, and operated in a satisfactory manner in the AQD District Supervisor. **(R 336.1224)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall maintain records for maintenance activities on EUACTANKS consistent with the manufacturers' recommendations to determine that the vapor condensation and recovery system is operating properly. All records shall be kept on file and made available to the Department upon request. **(R 336.1224, R 336.1702(a), R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to EUSILOS

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSILOS unless the emission capture system for the top of each storage silo is installed, maintained, and operated in a satisfactory manner to the AQD District Supervisor. **(R 336.1224)**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records for maintenance activities on EUSILOS and the emission capture system consistent with the manufacturers' recommendations to determine that the capture/control system is operating properly. All records shall be kept on file and made available to the Department upon request. **(R 336.1224, R 336.1702(a), R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

FLEXIBLE GROUP IDENTIFICATION

The following conditions apply to: FGFACILITY

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 8.9 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
2. Aggregate HAPs	Less than 22.5 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

* Beginning on the permit issuance date, and continuing for the first 12 calendar months, this limit applies to the cumulative total HAP emissions. Thereafter, the limit shall become a 12-month rolling limit.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 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(3))**
- The permittee shall keep the following information for FGFACILITY:
 - Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

If stack test results for FGFACILITY 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 District Supervisor. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in the Emission Limit Table shall be used to estimate the emissions of a pollutant from FGFACILITY. The permittee shall keep the records on file, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

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 vehicle 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 if using calcium chloride or weekly if using water during periods of operation. Watering may not be required during periods with precipitation. The dust control method shall be acceptable as determined by the AQD District Supervisor. If fugitive emissions are observed from haul roads or track-out occurs, abatement actions such as sweeping/watering shall increase in frequency until no further fugitive emissions or track-out occurs.
- 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 limit.
- c) The drop heights of all material transfer points and screening operations shall be minimized.
- d) Piles will be maintained to prevent fugitive dust. This includes the use of watering, covering, and encrusting agents. Watering or the use of encrusting agents shall occur as needed to maintain fugitive emissions from traveling offsite. Water or the use of encrusting agents may not be required during periods with precipitation.

2. MANAGEMENT OF ON-SITE ROADWAYS

- a) 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 dust to the ambient air in order 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 vehicle activity. The dust control method shall be acceptable as determined by the AQD District Supervisor.
- b) 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 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.
- 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 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 a Recordkeeping Log.

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.

7. FUGITIVE EMISSIONS FROM MINERAL AGGREGATE STOCKPILES

- a) Stock piling will be performed in a manner that minimizes freefall drop distance. The height of the front-end loader bucket shall be minimized to reduce the material drop height.

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 VISIBLE EMISSIONS IN THIS DOCUMENT, PARTICULARLY IN SECTION 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 District Supervisor.
- b) The pressure drop across the fabric filter dust collector shall be recorded at least once per operating day and kept in a recordkeeping log. This data shall be recorded in a recordkeeping log.

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 30 minutes 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. BLACK LIGHT INSPECTIONS.

A black light test shall be conducted at least once per year - within 2 weeks after operations begin for a paving season (excluding one early spring startup per season where the plant can operate for a maximum of three days). Black light inspection equipment and materials shall be available for use at the facility and used as needed during the paving season.

6. 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.

7. 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 District Supervisor.
- All significant maintenance activities performed on the fabric filter dust collector.

APPENDIX C

Emission Abatement Plan for Startup, Shutdown and Malfunctions

NORMAL STARTUP PROCEDURE

The plant computer controls plant startup. At startup the plant operator will enter the mix design, the tons per hour and the number of tons to be produced into the plant operations computer. Once the operator starts the equipment the computer will start the cold feed bins and set the feed rate (tons per hour) requested. The feed rate will be different for each mix design and production rate.

When the plant computer senses that aggregate is crossing over the belt scale, a timer that has been previously calibrated for the particular mix, starts to count down. When the timer reaches zero the asphalt cement is started and fed to the mixer. The two products (aggregate and asphalt cement) meeting together at the correct time will eliminate most dust that would escape from the mixing drum.

Material that is discharged at startup is removed by way of the drag slat and discharge gate. This material is dropped into a loader bucket, dump truck or a holding area. The material is then moved to the recycle pile.

The drop height from the discharge gate is kept to the very minimum to keep any escaping dust from blowing.

NORMAL SHUTDOWN PROCEDURE

When shutting down the mixing operation, the plant computer stops the cold feed bins first. Material that is in process is allowed to proceed down the weigh belt. When the weigh belt senses that all material has cleared the belt a timer starts counting down to shut off the asphalt cement. This timer allows all of the aggregate to clear the drying drum and enter the mixer. The asphalt cement is timed for each mix design so that the last of the aggregate and the asphalt cement meet at the mixing drum together.

Any mix that is waste is discharged into the loader bucket, dump truck or into a holding area under the drag slat discharge gate and is taken to the RAP pile for later crushing

HOT STOPS - HOT STARTS

If the silos become too full, the plant operator may have to make a hot stop, (dryer and mixer full of material). No material is discharged during a hot stop. The plant can remain in this mode for up to two hours.

After a hot stop, the plant will make a hot start. The exhaust fan and burner will be started and once running, the rest of the plant will be started. Cold or off-spec material is discharged through the drag slat discharge gate and placed in the RAP pile for later use.

MALFUNCTION STOPS

If a malfunction (computer or mechanical) occurs during drying/mixing operations, a hot stop will be initiated until the problem is corrected. If the problem cannot be corrected and the dryer/mixer must be emptied, the asphalt cement can be controlled manually. This will be done only after all attempts to correct the problem are exhausted.

If the asphalt pump fails and cannot be repaired, the drum will be emptied of mixed material until the discharged aggregate gets dusty. The drum will then be stopped and the asphalt pump repaired.

A water supply at each location can be used to knock down any blowing dust.

IDENTIFICATION OF SUPERVISORY AND MAINTENANCE PERSONNEL

An updated list of current supervisory and maintenance personnel shall be kept at the plant. Descriptions of the responsibilities of these individuals for operation of the plant during startups, shutdowns, or malfunctions, as well as inspections and repairs, shall be stated on the updated list.

Appendix C – Continued

DESCRIPTION OF INSPECTED ITEMS

A daily walk around inspection will be done each morning while the plant is warming up. After startup, observations will be carried out continuously throughout the day by the plant operator and the loader operator during operations. The following items shall be inspected/observed:

- Roadways (fugitive dust)
- Cold feed bins (falling aggregate)
- Aggregate feed belts (falling aggregate)
- Dryer (seals for dust escaping)
- Bucket elevator (seals for dust escaping)
- Aggregate chutes (seals for dust escaping)
- Screen (door seals for dust escaping)
- Weigh hopper (seals for dust escaping)
- Mixer (seals for dust escaping)
- Baghouse stack (opacity)
- Baghouse screws (shaft and door seals for dust escaping)
- Chutes, screw augers, and housings (for any leaks)
- Collection hoods and vents (physical condition and vacuum/suction)

A more thorough inspection will be done during the winter shutdown (between December 1 and April 1) for maintenance and repairs. The following items will be inspected and repairs made as needed:

- Cold feed bins (seals and belts rollers)
- Belt lines (belts and rollers)
- Dryer (shell, seals, flights)
- Bucket elevator (chain, buckets, bearings, seals)
- Chutes (liners, seals)
- Screen (door seals, fugitive ductwork)
- Weigh hopper (seals, calibration)
- Mixer (seals, wear plate)
- Silo Controls (seals, control material)

The baghouse will get a thorough inspection from the front inlet to the rear exhaust fan. This inspection will be done every spring before the paving season starts. (Additional visual inspections may be required before and during the paving season as required by Appendix B). The following items to be inspected are:

- Ductwork (inspected for thickness, will it last for the season)
- Blow pipes, diaphragm valves (are they working, good connections)
- Bags and cages (condition of bags, age, number replaced during last season)
- Dust screws - shaft seals and screw cover doors

REPLACEMENT PARTS

As required by Appendix B, the following shall be kept in stock at all times:

- A minimum of 15 bags.
- A minimum of 5 pounds of black light powder. (Recommended quantity for the number of square feet of baghouse cloth.)
- A minimum of two (2) tubes of silicone caulk for minor leaks around doors and seals.

Appendix C – Continued

BAGHOUSE VARIABLES AND MONITORING

The baghouse is monitored continuously (as specified in Appendix B) by the use of a magnehelic gage. The pressure differential between the dirty and clean side of the baghouse shall be maintained above 2 inches water gauge. If the pressure rises above 10 inches water gauge, signaling an inoperative diaphragm valve, the plant shall be stopped and the defective valve repaired or replaced. If the differential pressure drops below 2 inches water gauge the company shall inspect for a torn bag or a problem with the tubesheet between the dirty and clean side of the baghouse. This problem will also result in a dirty stack. The only time the baghouse will normally drop below 2 inches water gauge is if a large number of filter bags are replaced.

If a large number of bags are replaced (over 100) the pressure on the magnehelic will drop slightly. This drop will only last for a day or less depending on the production.

Monitoring of the baghouse is done by observation, magnehelic or by the high temperature alarm that is set to go off at a stack temperature of 375/400 degrees Fahrenheit.

CORRECTIVE PROCEDURES AND RESPONSIBLE PERSONS

This startup, shutdown, malfunction plan shall be followed to meet the compliance limits. If the limits are exceeded it is the responsibility of the plant supervisor, or in his absence the plant operator, to stop the plant and correct the problem immediately. Rule 336.1912 shall be followed when abnormal conditions exist.

DRUM MIX AND BATCH - NORMAL STARTUP PROCEDURES

During startup, operation and shutdown the following items will be monitored continuously:

Stack Temperature - As material starts through the plant the temperature must be brought up slowly by manually adjusting the burner. As the operator opens the burner, the exhaust fan damper must also be opened to maintain one quarter to one half inch of suction on the burner end of the drum.

Mix Temperature - As material starts flowing through the plant it is critical to watch mix discharge temperature in addition to the stack temperature. A discharge temperature that is too high will cause blue smoke. A temperature that is too low will produce an unacceptable product.

Exhaust Magnehelic - As material is fed into the drum and the burner is opened up, the differential pressure in the baghouse will increase. As the plant reaches normal operating parameters the pressure differential will settle between 2 and 10 inches water gauge. The differential pressure can be adjusted by opening or closing the exhaust damper. The operator shall keep between one quarter and one half-inch draw on the burner end for maximum efficiency.

Along with monitoring the above items the operator shall monitor the weather to determine any changes to the moisture levels in the aggregate and RAP. The moisture content determines how to adjust the burner to reach the desired mix discharge temperature.

APPENDIX D

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.

TABLE 1 - ALLOWABLE LEVELS FOR RUO

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	1,000 ppmw (maximum)

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

Appendix D – Continued

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.

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 the 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 for 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.