

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B583863946

FACILITY: RIETH RILEY CONSTRUCTION CO., INC.		SRN / ID: B5838
LOCATION: 1589 TOWNLINE RD, BENTON HARBOR		DISTRICT: Kalamazoo
CITY: BENTON HARBOR		COUNTY: BERRIEN
CONTACT: John Berscheit ,		ACTIVITY DATE: 07/28/2022
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On July 28, 2022 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Rieth-Riley Asphalt (formerly Consumers Asphalt Company) located in Benton Harbor, Berrien County. Rieth-Riley manufactures asphalt paving materials using either virgin aggregate materials or a combination of it and other recycled asphalt products (RAP). The facility had amended their permit in 2014 to replace some existing equipment with updated systems. These included replacing the 300 ton per hour system that had separate dryer and mixing drums with one 330 ton per hour unified (counter flow) drying and mixing drum. They replaced the burner (different manufacturer) but it is still rated at 100 million BTUs. Lastly, they replaced the old baghouse that had 13,258 square feet of cloth rated at 60,000 cfm with a new one that has 16,706 square feet of cloth rated at 80,000 cfm. The intent of the inspection was to determine the facilities compliance status with their air use permit PTI No. 110-87E and any other state and/or federal air regulations.

Staff arrived at the facility at approximately 12:20 p.m. after travel time and stopping at another facility located in Watervliet. Before exiting the vehicle, staff took a few minutes to see if any visible emissions (VEs) or any road dust could be observed. It had rained on the way to the facility so road dust wasn't currently an issue and staff didn't note any VEs other than steam. Staff then proceeded to the Control Room where they introduced them self to Ryan Price. Staff then asked if John Jonatzke was still there since staff had met with John during past inspections. Ryan mentioned that he didn't know John and that he and Justin Pomyba now run the control room, although he (Ryan) will be leaving at the end of the following week for another job. Ryan then asked what the inspection would entail and staff explained that the facility had an air permit with us and it contained conditions that the facility had to comply with. Ryan mentioned that Justin is the one who really is familiar with all that stuff and that he didn't think he could help staff. Staff asked when Justin would be available? Ryan mentioned that they had just started a night shift since MDOT has a job on I-94 that they will be paving at night, so Justin is on the night shift until about the 3<sup>rd</sup> week of August. Staff then mentioned that they will go through permit conditions and any that Ryan couldn't help staff with then staff would follow up with John Berscheit (Technical Services Manager) which they've had to do in the past also. Ryan said that would be fine. The following is a summary of staff's discussion with Ryan, the asphalt production process, and the permit conditions of PTI No. 110-87E along with their compliance status.

NOTE: Staff ended up calling John while they were at the facility and John mentioned that most of the records are kept on computer now and he would e-mail them to staff. He e-mailed them to staff later that day of the inspection and followed up with some more the following day (July 29<sup>th</sup>).

According to Ryan, he isn't aware of any new equipment that has been installed outside of what the equipment staff described in the 2014 permit modification and nothing has been removed to his knowledge. Staff asked about the Warm Mix Asphalt (Foaming System) that is strictly water based and Ryan mentioned that it is used in all mixes now. Staff had been told during the previous inspection by John Jonatske that it was only being used for state highway jobs. Staff then asked about plant start-up and Ryan said that they started up in the 2<sup>nd</sup> week of April this year and they will typically run through the end of November (usually around Thanksgiving give or take a week). He said that they've been really busy since start-up and they've been working a lot of hours. Staff then asked if the asphalt production system operation was still automated (computer) and he said that it was. Ryan said that they still just enter a mix number depending on what the job/customer requires. The materials that are required for the mix are dropped from their respective bins onto a conveyor that leads to the dryer/mixing drum. Here the various materials are dried and then mixed with asphalt cement concurrently and the material flow direction is opposite (counter flow) to the direction of the exhaust gases. Once all the materials are mixed the asphalt gets discharged onto a conveyor that leads to the storage silos.

The emissions from the asphalt making process are mainly from the exhaust gases during the drying/mixing operations. As just mentioned, the exhaust gases flow in the opposite direction of what the material is and they are directed to a primary collection box where large dust particles fall out due to gravity. These larger particles are then placed back into the mixing drum. Ultimately, the exhaust gases are directed into the baghouse that collects the finer particulates. These will ultimately be added back into the mixing/drying drum as well.

As mentioned in previous inspection reports, it has been staff's understanding that counter flow mixing drums are designed to be more thermal efficient and therefore can process recycled asphalt products (RAP) at up to 50% of the blend without much of a change in emissions. The facility had asked for an increase to this amount of RAP that can be used when they modified their permit in 2014. Ryan said that a 35% RAP mix has been the most used so far in any one mixture.

Staff then started a records review and the following is what staff noted in terms of the facilities compliance status with the permit conditions. NOTE: As had been mentioned above, staff had to follow up with John Berscheit regarding some of the records.

### 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)	Installation Date / Modification Date	Flexible Group ID

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-HMA-CFLOW	Hot mix asphalt (HMA) equipment including: Aggregate conveyors, 300 TPH counter flow unified drying/mixing drum, Warm Mix Asphalt (WMA) foaming system, Fabric filter dust collector	May 21, 2014	FGFACILITY
EUYARD	Fugitive dust sources including: Plant roadways, Plant yard, Material storage piles, Material handling operations (excluding cold feed aggregate bins)		FGFACILITY
EUACTANKS	Liquid asphalt cement storage tanks		FGFACILITY
EUSILOS	Hot Mix Asphalt (HMA) paving material product storage silo		FGFACILITY
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: EU-HMA-CFLOW

**DESCRIPTION:** Hot mix asphalt (HMA) equipment including: Aggregate conveyors, 300 TPH counter flow unified drying/mixing drum, and Warm Mix Asphalt (WMA) foaming system

Flexible Group ID: FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** High Temperature Fabric Filter

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.04 gr/dscf	Test Protocol*	EU-HMA-CFLOW	SC V.3	40 CFR 60 Subparts A & I

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
2. PM	0.04 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	SC V.3	R 336.1205(1) (a), R 336.1205 (3)
3. CO	0.1980 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	SC V.2	R 336.1205(3)
4. CO	89.9 tpy <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	EU-HMA- CFLOW	SC VI.8	R 336.1205(3)
5. SO <sub>2</sub>	0.14 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1205(3)
6. NO <sub>x</sub>	0.12 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1205(3)
7. Lead	2.0×10 <sup>-6</sup> lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1205(3)
8. Benzene	0.001 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1225
9. Toluene	0.006 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1225
10. Ethylbenzene	0.001 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1225
11. Xylene	0.001 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1225
12. Naphthalene	0.001 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA- CFLOW	GC 13	R 336.1225

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
13. Formaldehyde	0.01 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1225
14. Acrolein	3.6×10 <sup>-4</sup> lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1225
15. Arsenic	1.0×10 <sup>-6</sup> lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1224, R 336.1225
16. Nickel	1.0×10 <sup>-4</sup> lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1224, R 336.1225
17. H <sub>2</sub> SO <sub>4</sub>	0.0032 lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1224, R 336.1225
18. Manganese	5.0×10 <sup>-5</sup> lb / ton <sup>b</sup>	Test Protocol*	EU-HMA-CFLOW	GC 13	R 336.1224, R 336.1225

<sup>a</sup> Annual limits based on 908,000 tons HMA paving material production.

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

\* Test Protocol shall specify averaging time.

AQD Comment: Appears to be in COMPLIANCE. Back in 2014, the AQD had sent the facility a VN for not testing for CO and PM within the permitted time-frames and then sent another VN later for failing the PM emission limit when they did complete the test. A follow up PM test indicated compliance with the emission limits. The AQD has not requested stack testing of any of the other pollutants. The most recent 12-month rolling time period ending June 2022 reviewed by staff indicated CO emissions at 32.83 tons.

## II. MATERIAL LIMITS

1. The permittee shall not burn any fuel other than natural gas, propane, distillate oil, residual oil, blended fuel oil, or recycled used oil in in EU-HMA-CFLOW. (R 336.1224, R 336.1225, R 336.1702)

AQD Comment: Appears to be in COMPLIANCE. Looking at records, the facility has only been using natural gas which John confirmed was the case.

2. The permittee shall not burn in EU-HMA-CFLOW any hazardous waste (as defined in state or federal law). Nor should the permittee burn in EU-HMA-CFLOW any blended fuel oil or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point or ash content vary from the standards specified in the following table.. (R 336.1201(3), 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	0.6	Weight %
Minimum Flash Point	100.0	°F
Maximum Ash Content	1.0	Weight %
Acidity	Minimum pH = 4 Maximum pH=10	N/A

AQD Comment: Appears to be in COMPLIANCE. The facility doesn't burn any hazardous waste and hasn't burned any RUO.

3. The permittee shall not use any asbestos tailings or waste materials containing asbestos in EU-HMA-CFLOW 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)

**AQD Comment:** Appears to be in COMPLIANCE. Staff was told they do not use asbestos containing materials in their process.

4. The permittee shall limit the asphalt mixture processed in EU-HMA-CFLOW to a maximum of 50 percent RAP material based on a monthly average. (R 336.1224, R 336.1225, R 336.1702)

**AQD Comment:** Appears to be in COMPLIANCE. Records reviewed by staff ending in June 2022 indicated that the highest RAP usage was in July of 2021 at 34%. As mentioned earlier, Ryan stated the most they've used in a mixture this year has been about 35%.

5. The permittee shall not process more than 908,000 tons of HMA paving materials in EU-HMA-CFLOW per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(1)(a), R 336.1205(3))

**AQD Comment:** Appears to be in COMPLIANCE. Records reviewed by staff for the most recent 12 month rolling time period ending June 2022 showed that they've processed 331,630 tons.

6. The permittee shall not process more than 300 tons of HMA paving materials in EU-HMA-CFLOW per hour based on a 24-hour rolling time period as determined at the end of each hour. (R 336.1224, R 336.1225, R 336.1702)

**AQD Comment:** Appears to be in COMPLIANCE. Records reviewed by staff indicates that they appear to average approximately 220 to 250 tons per hour.

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EU-HMA-CFLOW 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)

**AQD Comment:** Appears to be in COMPLIANCE. The facility appears to be following the plan. Staff noted the roads appeared to still be wet from the earlier rain. The facility documents when they sweep and/or water their roads.

2. The permittee shall not operate EU-HMA-CFLOW unless the Preventative Maintenance Program specified in Appendix B has been implemented and is maintained. (R 336.1910, R 336.1911)

**AQD Comment:** Appears to be in COMPLIANCE. The facility appears to following the PMP and are meeting the requirements of the monitored parameters of it.

3. The permittee shall not operate EU-HMA-CFLOW 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)

**AQD Comment:** Appears to be in COMPLIANCE. The facility appears to be following the above plan also.

4. The permittee shall not operate EU-HMA-CFLOW unless the Compliance Monitoring Plan (CMP) for RUO specified in Appendix D, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained.

(R 336.1201(3), R 336.1225, R 336.1371, R 336.1372, R 336.1910, R 336.1911, Act 451 324.5521, 40 CFR 279.55)

**AQD Comment:** Appears to be in COMPLIANCE. The facility appears to be following the above plan also and the facility doesn't use any RUO.

5. The permittee shall maintain the efficiency of the EU-HMA-CFLOW drum mix burners, to control CO emissions, by fine tuning the burners for proper burner operation and performance. This shall be done at the start of each paving season or upon a malfunction of EU-HMA-CFLOW as shown by the CO emission monitoring data. (R 336.1205)

**AQD Comment:** Appears to be in COMPLIANCE. They did the first monitoring event in April just after plant start-up in the Spring and staff was told they haven't had any malfunctions to date this year. They also did another monitoring event earlier in July. Both events indicated CO emissions under 500 ppm as required.

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-HMA-CFLOW 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 between 2 and 10 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. (R 336.1910)

**AQD Comment:** Appears to be in COMPLIANCE. The facility appears to be maintaining and operating the baghouse properly and the pressure drop was at -4.2 inches during staff's inspection.

#### V. TESTING/SAMPLING

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

1. Verification and quantification of odor emissions from EU-HMA-CFLOW, by testing at owner's expense, in accordance with Department requirements, may be required for continued operation. Within 60 days upon notification from AQD District Supervisor, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method shall be submitted to the AQD. The stack sampling plan shall include provisions for various fuel usages, plant operating conditions, and odor neutralizer system operation (if any). The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results within 120 days from notification from the AQD District Supervisor. (R 336.2001, R 336.2003, R 336.2004)

**AQD Comment:** COMPLIANCE. Odor testing has not been requested.

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 and quantify emission rates of Carbon Monoxide from EU-HMA-CFLOW, by testing at owner's expense, in accordance with Department requirements. No less than 45 days prior to testing, a complete test plan including a testing schedule shall be

submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results within one calendar year of permit issuance. (R 336.1205(1)(a), R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)

**AQD Comment:** Appears to be in COMPLIANCE at present time. The AQD originally had to send the facility a VN for not testing for CO and PM within the permitted time-frames but testing has since been completed and showed compliance with the emission limit.

3. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, federal Standards of Performance for New Stationary Sources require verification of particulate emission rates from EU-HMA-CFLOW, 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 45 days prior to testing, a complete test plan including a testing schedule shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (40 CFR Part 60 Subparts A & I)

**AQD Comment:** Appears to be in COMPLIANCE at present time. The AQD originally had to send the facility a VN for not testing for CO and PM within the permitted time-frames and then sent another VN later for failing the PM emission limit when they did complete the test. A follow up PM test indicated compliance with the emission limits.

## VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1201, R 336.1205(1)(a))

**AQD Comment:** Appears to be in COMPLIANCE.

2. The permittee shall monitor, in a satisfactory manner, the virgin aggregate feed rate and the RAP feed rate to EU-HMA-CFLOW on a continuous basis. (R 336.1224, R 336.1225, R 336.1702)

**AQD Comment:** Appears to be in COMPLIANCE. The facility is monitoring the feed rate of virgin aggregate and RAP into the hot mix asphalt facility. They are also recording the mix designs and times of start-up when a new mix is activated, along with aggregate feed rates.

3. The permittee shall monitor, with a handheld CO monitor, the CO emissions from EU-HMA-CFLOW and the production data associated with the time the emissions data were collected. The CO emissions should be less than 500 ppmv to ensure EU-HMA-CFLOW 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. Any request for an alternate monitoring schedule shall be submitted in writing to the AQD District Supervisor for review and approval. Data collected by this method shall be used for determining proper burner operation. (R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)

AQD Comment: Appears to be in COMPLIANCE. The facility is doing the above as required. The readings upon start-up in April were all under 500 ppm and another test in July indicated the same. They take the CO readings with a Bacharach CO analyzer.

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 EU-HMA-CFLOW. The permittee shall keep records of all source emissions data and operating information on file and make them available upon request. (40 CFR Part 60 Subparts A & I)

AQD Comment: Appears to be in COMPLIANCE with the above.

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 of EU-HMA-CFLOW maintained and operating in a satisfactory manner at all times. The owner or operator shall maintain a log of all significant maintenance activities conducted and all significant repairs made to EU-HMA-CFLOW. Maintenance records for the fabric filter dust collector shall be consistent with the Preventative Maintenance Program specified in Appendix B. All records shall be kept on file and made available to the Department upon request. (R 336.1910, R 336.1911)

AQD Comment: Appears to be in COMPLIANCE. The facility appears to be maintaining the equipment properly as well as keeping maintenance records.

6. The permittee shall keep the following records for each calendar month that EU-HMA-CFLOW is operated:

- a) Identification, type and the amounts (in gallons) of all fuel oils combusted.
- b) Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (Btu/lb) of all fuel oils being combusted.

- c) Tons of hot mix asphalt containing RAP produced, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.

All records shall be kept on file and made 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)

**AQD Comment:** Appears to be in COMPLIANCE. The facility is maintaining records of all the above.

7. The permittee shall keep intermittent daily records of the following production information for EU-HMA-CFLOW:

- 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.

Upon start-up, the initial mix design and time shall be recorded. When a new mix design is activated after start-up, the time and new mix design shall be recorded. All records shall be kept on file until the end of the paving season in which they were recorded and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)

**AQD Comment:** Appears to be in COMPLIANCE. The facility is keeping records of the above. They have a computer that prints these items out daily.

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 EU-HMA-CFLOW. If stack test results for EU-HMA-CFLOW exist for any of the aforementioned pollutants, those stack test results may be used to estimate pollutant emissions subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in the Emission Limit Table shall be used to estimate the emissions of a pollutant from EU-HMA-CFLOW. All records shall be kept on file and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)

**AQD Comment:** Appears to be in COMPLIANCE. The facility is doing this and the AQD hasn't requested any additional testing of the listed pollutants outside of CO and PM.

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. All records shall be kept on file and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)

AQD Comment: Appears to be in COMPLIANCE. The facility is doing this. They use a Bacharach hand held CO monitor and it prints out the date, time, concentration, etc.

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 EU-HMA-CFLOW. All records shall be kept on file and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3))

AQD Comment: Appears to be in COMPLIANCE. The facility is doing this.

11. The permittee shall monitor, in a satisfactory manner, the fuel usage rate for EUHMAPLANT on a daily basis in gallons per day. (R 336.1205(1)(a), R 336.1205(3), R 336.1225, R 336.1402)

AQD Comment: Appears to be in COMPLIANCE. The facility is doing this.

## VII. REPORTING

1. 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 EU-HMA-CFLOW. (R 336.1201(7)(a))

AQD Comment: Appears to be in COMPLIANCE.

## 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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-HMA-CFLOW	44	35	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air			

AQD Comment: Appears to be in COMPLIANCE. The stack appears to meet the requirements cited above.

The following conditions apply to: EUYARD

**DESCRIPTION:** Fugitive dust sources including: Plant roadways, Plant yard, Material storage piles, Material handling operations (excluding cold feed aggregate bins)

Flexible Group ID: FGFACILITY

## II. PROCESS/OPERATIONAL RESTRICTIONS

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

AQD Comment: Appears to be in COMPLIANCE. The facility appears to be following their fugitive dust plan.

## VI. MONITORING/RECORDKEEPING

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1371, R 336.1372)

AQD Comment: Appears to be in COMPLIANCE.

2. 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 MAERS. (R 336.1371, R 336.1372)

AQD Comment: Appears to be in COMPLIANCE with how they report emission in MAERS.

## 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)

AQD Comment: Appears to be in COMPLIANCE with reporting to MAERS

The following conditions apply to: EUACTANKS

**DESCRIPTION:** AC Tanks

Flexible Group ID: FGFACILITY

## III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUACTANKS on or after December 12, 2014 unless the vapor condensation and recovery system is installed, maintained, and operated in a satisfactory manner. (R 336.1224)

AQD Comment: Appears to be in COMPLIANCE. This system has been installed and appears to be maintained and operated properly.

The following conditions apply to: EUSILOS

DESCRIPTION: Silos

Flexible Group ID: FGFACILITY

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSILOS on or after December 12, 2014 unless the emission capture system for the top of each storage silo is installed, maintained, and operated in a satisfactory manner. (R 336.1224)

AQD Comment: Appears to be in COMPLIANCE. The emission capture system on each silo has been installed and appears to be maintained and operated properly.

2. The permittee shall not operate EUSILOS on or after April 1, 2015 unless all the silo load-out activities occur in an permanently installed enclosure. Emissions collected from the truck load-out area shall be vented into the burning zone of EU-HMA-CFLOW or controlled by equivalent means. The permittee shall not operate EUSILOS on or after April 1, 2015 unless the silo load-out control system is installed, maintained and operated in a satisfactory manner. (R 336.1901)

AQD Comment: Appears to be in COMPLIANCE. The enclosure and load-out control system have been installed and appear to be maintained and operated properly.

**FLEXIBLE GROUP SUMMARY TABLE**

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	EU-HMA-CFLOW, EUYARD, EUACTANKS, EUSILOS

The following conditions apply Source-Wide to: FGFACILITY

**DESCRIPTION:** All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment

**Emission Units:** EU-HMA-CFLOW, EUYARD, EUACTANKS, EUSILOS

**POLLUTION CONTROL EQUIPMENT:** Baghouse for EU-HMA-CFLOW

### **I. EMISSION LIMITS**

Pollutant	Limit	Time Period	Equipment	Testing / Monitoring Method	Applicable Requirements
2. Each Individual HAP	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(3)
3. Aggregate HAPs	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(3)
1. CO	89.9 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	R 336.1205(3)

**AQD Comment:** Appears to be in COMPLIANCE with all 3 limits above. Records through June of 2022 showed CO at 32.83 tons, individual HAPs at most were 1.7 tons (Formaldehyde), and aggregate HAPs at approximately 3.5 tons.

### **VI. MONITORING/RECORDKEEPING**

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

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1201)

**AQD Comment:** Appears to be in COMPLIANCE.

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO emission calculation records for FGFACILITY, as required

by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

**AQD Comment:** Appears to be in COMPLIANCE.

**3. The permittee shall keep the following information for FGFACILITY:**

a) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.

b) 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. 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. All records shall be kept on file and made available to the Department upon request. (R 336.1205(3))

**AQD Comment:** Appears to be in COMPLIANCE. No testing of any HAPs has been requested by the AQD.

**4. The permittee shall keep records of the application of all material reformulation/substitution plans for the first 12-months following issuance of this permit. Records shall include the material safety data sheets (MSDS) and the identity of the original materials and the reformulated/substituted materials. (R 336.1205(3))**

**AQD Comment:** Appears to be in COMPLIANCE.

**AQD COMMENT TO PLANS LISTED BELOW: The facility appears to be complying with all the requirements of Appendices A through D below. The facility doesn't burn any RUO which Appendix D pertains to.**

## 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 MDEQ staff upon request until the end of the paving season. The records will indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what action was taken. 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 VISIBLE EMISSIONS 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 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.

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

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#### 6. BLACK LIGHT INSPECTIONS

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

#### 7. INVENTORY OF FILTER BAGS

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

### 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 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.

### **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)

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)

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.

### **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

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 a minimum of five (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 five (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.

Any independent laboratory used by the facility for RUO analysis shall develop a Quality Assurance Plan (QAP). 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. The facility shall maintain a copy of the approved QAP on site or at the corporate offices and be available for AQD inspection.

#### 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 five (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 any of the 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 five (5) years.

**INSPECTION SUMMARY:** The facility appears to be in COMPLIANCE with the terms and conditions of PTI No. 110-87E at the present time. Staff thanked Ryan for his time and departed the facility at approximately 1:45 p.m.

NAME Matt Decker

DATE 8-10-22

SUPERVISOR RIL 8/10/22