

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

P117172838

FACILITY: AJAX MATERIALS CORPORATION - PLANT 4		SRN / ID: P1171
LOCATION: 5088 Energy Drive, FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Kathleen Anderson , Environmental Manager		ACTIVITY DATE: 07/26/2024
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced inspection and review of records. These Partial Compliance Evaluation (PCE) activities were conducted as part of a Full Compliance Evaluation activity (FCE).		
RESOLVED COMPLAINTS:		

On July 26, 2024, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced inspection of Ajax Materials Corporation - Plant 4 (Ajax Materials). The AQD subsequently reviewed plant recordkeeping. These Partial Compliance Evaluation (PCE) activities were conducted as part of a Full Compliance Evaluation (FCE).

Facility environmental contacts:

- David Grabowski, Operations Manager; 248-388-1670; dgrabowski@ajaxpaving.com
- Kathleen Anderson: Environmental Manager; 248-244-3300, ext. 3410; kanderson@ajaxpaving.com

EGLE, AQD staff:

Dan McGeen, Inspector: 517-648-7547; McGeenD@michigan.gov

Facility description:

This facility is a hot mix asphalt (HMA) plant, which produces paving materials, primarily for the road construction industry, using a counter-flow drum mixer/dryer process. HMA paving materials are a mixture of aggregates and asphalt cement which are heated and mixed.

Emission units:

Emission Unit* ID	Emission unit Description	Permit to Install (PTI) No.	Compliance Status
EUHMAPLANT	Hot mix asphalt (HMA) facility including: aggregate conveyors, a 500 tons per hour (TPH) counter-flow drum, and a 100,000 cfm baghouse	90-21	Compliance
EUYARD	Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).	90-21	Compliance

EUACTANKS	Six 30,000 gallon liquid asphalt cement storage tanks with a total heat capacity of 2 MMBtu/hr.	90-21	Compliance
EUSILOS	Eight 300 ton capacity hot mix asphalt (HMA) paving material product storage silos.	90-21	Compliance

***An *emission unit* is any part of a stationary source that emits or has the potential to emit an air contaminant.**

Regulatory overview:

This Ajax Materials HMA plant is permitted under PTI 90-21. This is an opt-out permit, which contains opt-out emission limits for carbon monoxide (CO) and sulfur dioxide (SO₂), to keep the facility from having the potential to emit (PTE) to be a major source. A *major source* has the PTE of 100 TPY of one or more of the *criteria pollutants*, that is, those pollutants for which a national ambient air quality standard exists. Those include CO and SO₂, but also nitrogen oxides (NO_x), volatile organic compounds (VOC), particulate matter (PM), particulate matter smaller than 10 microns (PM-10), particulate matter smaller than 2.5 microns (PM_{2.5}), and lead.

There are also facility wide opt-out limits for individual hazardous air pollutants (HAPs), and aggregate or total HAPs and associated recordkeeping under FGFACILITY. A major source of HAPs has a PTE of 10 TPY or more of any one HAP, or a PTE of 25 TPY or more of total HAPs. An *area source* is any source which is not major for HAPs.

Additionally, the facility is subject to the federal regulation 40 CFR Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities.

Fee status:

This facility is classified as a Category D fee source, because it is subject to a New Source Performance Standard, 40 CFR, Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities.

The facility is required to submit an annual air emissions report to MiEnviro.

Location:

- Address: 5088 Energy Drive, Genesee Township, Genesee County, 48505.
- Description: The site is in the southwest corner of Genesee Township within an industrial park. Nearby, just to the south of E. Carpenter Road, is the City of Flint. To the east is wooded area, and to the south are woods, followed by a residence, E. Carpenter Road, and then a larger residential area of homes, apartments, and a closed school.

Hours of operation:

Monday-Friday, starting at 5:00 AM; rarely operating on weekends.

Safety apparel required:

Safety glasses with side shields, steel-toed boots, hard hats, and high visibility vests are required.

Recent stack testing:

Stack testing was conducted on 8/30, 9/1, and 9/5/2024 for the following parameters, meeting the regulatory limits:

- PM (including visible emissions testing)
- PM10
- PM2.5
- CO
- SO2
- NOx
- VOC
- Formaldehyde
- Lead
- Arsenic
- Nickel
- Manganese
- Benzene
- Toluene
- Ethylbenzene
- Xylene

Recent complaints:

In 2023, 4 odor complaints were received, the first of those before the plant had begun operations. Complaint investigations did not find that odors violated Michigan Air Pollution Control (MAPC) Rule 901(b) which prohibits unreasonable interference with the comfortable enjoyment of life and property.

Odor evaluation:

An odor evaluation was conducted prior to arrival.

- Odor evaluation start time: 8:29 AM.
- Weather conditions: Sunny and 65 degrees F, with winds out of the east at 5-10 miles per hour (mph).
- Route taken: From the intersection of N. Dort Hwy. and E. Carpenter Rd., north to Coldwater Rd. Then east on Coldwater Rd., south on Bray Rd., and east on E. Carpenter Rd., to the parking lot of St. Francis Prayer Center. Then east again on E. Carpenter Rd., north on Energy Dr. to the end of the road, and south to the Ajax Materials entrance.

Odors detected:

Time	Location	Odor Level	Odor Description	Comments
8:14 AM	N. Dort Hwy. & Schaaf Dr.	2	Woodpile	From woodpile at Genesee Power Station (GPS).

8:20 AM	N. Dort Hwy. & Coldwater Rd.	2	Woodpile	
8:30 AM	N. Dort Hwy.	2	Woodpiles	Adjacent to site of Buckeye Terminals, LLC – Flint Terminal.
8:33 AM	Coldwater & Bray Rds.	2	Diesel exhaust	From vehicle.
8:39 AM	Energy Drive	2	Asphalt odor	Driving north past entrance to Ajax Materials.

The AQD 0 to 5 odor scale is as follows:

0 - Non-Detect

1 - Just barely detectable

2 - Distinct and definite odor

3 - Distinct and definite objectionable odor

4 - Odor strong enough to cause a person to attempt to avoid it completely

5 - Odor so strong as to be overpowering and intolerable for any length of time

The level 2 asphalt odor detected on Energy Drive outside the plant entrance was determined to be insufficient to constitute a violation of MAPC Rule 901(b).

Arrival at site:

The AQD was represented by Dan McGeen, inspector.

- Arrival time: 8:47 AM.
- Weather conditions: Sunny and 65 degrees F, with winds out of the east at 5-10 miles per hour (mph).
- Fugitive dust: None observed. Onsite roadways and Energy Drive in front of plant were freshly watered.
- Visible emissions: 0% opacity from baghouse exhaust stack, and a detached steam plume.

Upon arrival onsite, D. McGeen parked behind the site office building, and went to the control tower. He met with the plant operator, Scott. D. McGeen had his credentials available, per the AQD procedures, but has been to this site a number of times and is recognized by employees there. He explained the reason for today's visit.

Inspection:

The plant was operating. A water truck began applying water to the site, which had also been watered at some point prior to the AQD's arrival. The facility applies water with the 800-gallon truck several times per day, D. McGeen was advised. Rumble strips on the approach to the site exit are used to dislodge dirt and mud from truck tires. The rumble strips are enhanced by the addition of water, to function as a wheel wash system, please see attached photo. The rumble strips are said to be swept out as needed, so that they do not fill with sediment and lose effectiveness.

D. McGeen collected plant operating data, summarized below.

HMA plant operating data on 7/26/2024:

Time	Approx. 9:15 AM	9:46 AM	11:18 AM
Production rate tons per hour (TPH)	266	255	278
Mix temperature degrees F	303	271	305
Mix type	1100 T1	4C	4C
Virgin aggregate TPH	208	129	141
Recycled Asphalt Pavement (RAP) TPH	46	117	126
% RAP	17.29	45.88	45.32
Baghouse pressure drop in inches, water column (w.c.)	2.7	2.8	2.7
Fuel type	Natural gas	Natural gas	Natural gas

*Parameters in the above table reflect PTI 90-21, SC EUHMAPLANT, SC VI.7 which requires the following:

The permittee shall keep daily records of the following production information for EUHMAPLANT, updated upon the start of each new blend:

- a) The virgin aggregate feed rate.*
- b) The RAP feed rate.*
- c) The asphalt paving material product temperature.*
- d) Information sufficient to identify all ingredients of the asphalt paving material mixture.*

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

Visible emissions check:

Source	Visible Emissions?
Baghouse exhaust stack	No, aside from detached steam plume
Drum dryer	No
Burner	No
Virgin aggregate conveyors	No
Virgin aggregate scalper screen	No
RAP conveyors	No
RAP scalper screen	No
RAP collar	No
Ductwork	No
Knockout box (gravity collector)	No
Baghouse dust recycling lines to drum	No
Mineral filler or flyash silo (not in use)	No
Liquid AC tanks w/shared adsorber	No

Liquid AC heater	No
Drag slat conveyor	No
Top of silos	No
Truck loadout tunnel	One instance out of a number of observed loadouts*.
Blue smoke control device	No
Paved roadways	No
Unpaved roadways	No
Yard area	No

*At 9:15 AM, a single puff of blue smoke or steam exited the end of a Flowboy trailer which was too long for the tunnel, when a load of HMA at the front of the trailer appeared to displace air. All other truck loadouts observed during the inspection were free of any escaping visible emissions. This was not found to be a violation of PTI 90-21, EUSILOS, SC III.1 or 2.

CO readings from fine-tuning the drum dryer burner on 4/26/2024:

CO Reading #	Time Reading Taken	CO Parts Per Million (PPM)
1	7:50 AM	178
2	7:54 AM	181
3	7:58 AM	201
4	8:02 AM	249
5	8:06 AM	269
6	8:10 AM	237

7	8:17 AM	250
8	8:22 AM	232

Above readings taken by C. Edwards of Ajax Materials.

Production data associated with the above readings:

- Fuel type: Natural gas
- Production rate: 250
- RAP content: 48%
- Mix type: 13A

Compliance Check with Special Conditions (SC) of PTI 90-21:

EUHMAPLANT

DESCRIPTION

Hot mix asphalt (HMA) facility including: aggregate conveyors, a 500 TPH counter-flow drum, and a 100,000 cfm baghouse

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Fabric filter dust collector

Compliance Check with SC of PTI 90-21, HMAPLANT:

PTI 90-21 SC	Requirement	Comments	Complies?
EUHMAPLANT, SC I.1	Particulate matter (PM) emissions limited to 0.04 gr/dscf over an hourly time period.	The facility met this limit, with 2023 stack test results of 0.00 gr/dscf which the AQD recalculated as 0.01 gr/dscf.	Yes
EUHMAPLANT, SC I.2			Yes

	PM limited to 0.036 lb/ton of HMA produced over an hourly time period.	The facility met this limit, with 2023 test results of 0.003lb/ton.	
EUHMAPLANT, SC I.3	PM limited to 15.95 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling PM at 0.21 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
EUHMAPLANT, SC I.4	PM10 limited to 0.05 lb per ton of HMA produced over an hourly time period.	The facility met this limit with 2023 reported test results of 0.01 lb/ton which the AQD recalculated as 0.00 lb/ton.	Yes
EUHMAPLANT, SC I.5	PM10 limited to 21.91 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling PM10 at 0.35 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
EUHMAPLANT, SC I.6	PM2.5 limited to 0.05 lb per ton of HMA produced over an hourly time period.	The facility met this limit with 2023 reported test results of 0.01 lb/ton which the AQD recalculated as 0.00 lb/ton.	Yes
EUHMAPLANT, SC I.7	PM2.5 limited to 21.91 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling PM2.5 at 0.35 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
EUHMAPLANT, SC I.8	CO limited to 0.2 lb per ton produced over an hourly time period.	The facility met this limit with 2023 test results of 0.0 lb/ton.	Yes
			Yes

EUHMAPLANT, SC I.9	CO limited to 87.63 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling CO at 2.02 tons as of July 2024, based on stack test data. See attached spreadsheet.	
EUHMAPLANT, SC I.10	<ul style="list-style-type: none"> • SO2 limited to 0.16 lb per ton over an hourly time period when burning Fuel Oil #6. • SO2 limited to 0.089 lb per ton when burning Fuel Oils #1-5, propane, or natural gas. 	<ul style="list-style-type: none"> • NA, as plant has never burned #6 fuel oil. • The facility met this limit with 2023 test results of 0.008 lb/ton when burning natural gas. 	<ul style="list-style-type: none"> • NA: #6 fuel oil never used • Yes
EUHMAPLANT, SC I.11	SO2 limited to 70.11 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling SO2 at 0.56 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
EUHMAPLANT, SC I.12	NOx limited to 0.07 lb/ton over an hourly time period.	The facility met this limit with 2023 test results of 0.003 lb/ton.	Yes
EUHMAPLANT, SC I.13	NOx limited to 30.67 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling NOx at 2.16 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
EUHMAPLANT, SC I.14	VOC limited to 0.06 lb/ton over an hourly time period.	The facility met this limit with 2023 test results of 0.01 lb/ton.	Yes
EUHMAPLANT, SC I.15	VOC limited to 26.29 TPY based on a 12-month rolling time period, as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling VOC at 0.34 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
			Yes

EUHMAPLANT, SC I.16	Lead limited to 1.00×10^{-5} lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.0000004 lb/ton, which the AQD recalculated as 0.0000003 lb/ton, or 3.0×10^{-7} lb/ton.	
EUHMAPLANT, SC I.17	Benzene limited to 0.00075 lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.00010 lb/ton.	Yes
EUHMAPLANT, SC I.18	Toluene limited to 0.003 lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.000 lb/ton.	Yes
EUHMAPLANT, SC I.19	Ethylbenzene limited to 0.001 lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.000 lb/ton.	Yes
EUHMAPLANT, SC I.20	Xylene limited to 0.001 lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.000 lb/ton.	Yes
EUHMAPLANT, SC I.21	Naphthalene limited to 0.00078 lb per ton over an hourly time period.	This parameter has not been tested for.	Not tested for
EUHMAPLANT, SC I.22	Formaldehyde limited to 0.0054 lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.0006 lb/ton, which the AQD recalculated as 0.0007 lb/ton.	Yes
EUHMAPLANT, SC I.23	Acrolein limited to 0.001 lb per ton over an hourly time period.	This parameter has not been tested for.	Not tested for
EUHMAPLANT, SC I.24	Arsenic limited to 2.0×10^{-6} lb per ton over an hourly time period.	The facility met this limit with test results of 0.0000002 lb/ton, or 2.0×10^{-7} lb/ton.	Yes
EUHMAPLANT, SC I.25	Nickel limited to 0.000076 lb per ton over an hourly time period.	The facility met this limit with 2023 test	Yes

		results of 0.000002 lb/ton.	
EUHMAPLANT, SC I.26	H₂SO₄ (sulfuric acid) limited to 0.0032 lb per ton over an hourly time period.	This parameter has not been tested for.	Not tested for
EUHMAPLANT, SC I.27	Manganese limited to 3.5 ×10⁻⁵ lb per ton over an hourly time period.	The facility met this limit with 2023 test results of 0.000004 lb/ton.	Yes
EUHMAPLANT, SC 1.28	Opacity limited to 20% over a 6-minute average, from the drum dryer; systems for handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler/aggregate and the loading, transfer, and storage systems associated with emission control systems.	The facility met this limit, as opacity was 0% throughout the entire inspection.	Yes
EUHMAPLANT, SC II.1	The permittee shall not burn any fuel other than natural gas, propane, and fuel oil #1-6 in EUHMAPLANT. Fuel oil #6 shall have no more than a 1% sulfur content, all other fuel oils are limited to 0.5%.	The facility met this requirement, as it was burning natural gas.	Yes
EUHMAPLANT, SC II.2	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.	The facility met this requirement, as they stated they do not use asbestos or asbestos tailings, and no suspect materials were observed.	Yes
EUHMAPLANT, SC II.3	The permittee shall limit the asphalt mixture processed in EUHMAPLANT to a maximum of 50 percent RAP material based on a weekly average.	The facility met this requirement. The attached RAP Usage Report was provided for July 2024. Weekly average RAP values: • 7/1-7/6: 42%	Yes

		<ul style="list-style-type: none"> • 7/7-7/13: 44% • 7/14-20: 45% • 7/21-27: 42% • 7/28-8/3: 39% 	
EUHMAPLANT, SC II.4	The permittee shall not process more than 876,322 tons of HMA paving materials in EUHMAPLANT per 12-month rolling time period as determined at the end of each calendar month.	The facility met this requirement, with the 12-month rolling total being 139,604.91 at the end of July 2024. Please see attached records and spreadsheet.	Yes
EUHMAPLANT, SC II.5	The permittee shall not process more than 550 tons of HMA paving materials in EUHMAPLANT per hour as determined at the end of each hour.	The facility met this requirement. For July 2024, the highest hourly production value was 404.37 TPH on 7/1. Please see attached records.	Yes
EUHMAPLANT, SC II.6	The permittee shall not process more than 12,000 tons of HMA paving materials per day in EUHMAPLANT as determined at the end of each calendar day.	The facility met this requirement. For July 2024, the highest daily production was 3,314.87 tons on 7/25. Please see attached records.	Yes
EUHMAPLANT, SC III.1	The permittee shall not operate EUHMAPLANT unless the Fugitive Dust Control Plan for EUYARD specified in Appendix A, or alternative as approved by the district supervisor, has been implemented and is maintained.	The facility met this requirement.	Yes
EUHMAPLANT, SC III.2	The permittee shall not operate EUHMAPLANT unless the Preventative Maintenance Program specified in Appendix B, or alternative as approved by the district supervisor, has been implemented and is maintained.	The facility met this requirement.	Yes
EUHMAPLANT, SC III.3	The permittee shall not operate EUHMAPLANT unless the	The facility met this requirement.	Yes

	Emission Abatement Plan for Startup, Shutdown and Malfunctions specified in Appendix C, or alternative as approved by the district supervisor, has been implemented and is maintained.		
EUHMAPLANT, SC III.4	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; after every 500 hours of operation thereafter or upon a malfunction of EUHMAPLANT as shown by the CO emission monitoring data, whichever occurs first.	The facility met this requirement, as records (attached) of CO monitoring data on 4/26/2024 showed that they fine-tuned the burner at the start of this paving season. Please see CO table in inspection narrative, earlier in this report.	Yes
EUHMAPLANT, SC III.5	The permittee shall install and operate the asphalt plant as reviewed in the permit application for PTI 90-21 except as allowed under Rules 201 and Rule 278(1)(b).	The facility met this requirement. No new emission units had been added.	Yes
EUHMAPLANT, SC IV.1	The permittee shall install, maintain, and operate the fabric filter dust collector, associated parameter monitoring, recording system, and associated alarm systems for EUHMAPLANT in a satisfactory manner. The baghouse shall be equipped with a bag leak detection system and alarm. The bag leak alarm system that will be calibrated and fully operational within 180 days of startup. Except as allowed in Appendix C, satisfactory operation of the fabric filter dust collector requires a pressure drop range between 2 and 10 inches of	The facility met this requirement. The AQD was informed that the bag leak detection system alarm has never gone off, nor has the high temperature alarm. During the inspection, pressure drop was within the correct range.	Yes

	<p>water column during operation. The minimum pressure drop shall not be less than 2 inches water gauge during operation, unless a reason acceptable to the AQD has been provided, such as when a large number of filter bags have been replaced.</p>		
<p>EUHMAPLANT, SC V.1</p>	<p>The verification and quantification of odor emissions from EUHMAPLANT, by testing at owner's expense, in accordance with Department requirements may be required for continued operation. Within 60 days upon notification from the AQD District Supervisor, the permittee shall submit to the AQD Technical Programs Unit and District Office, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method. The stack sampling plan shall include provisions for various fuel usages, plant operating conditions, and odor neutralizer system operation (if any). The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 120 days from notification from the AQD District Supervisor.</p>	<p>NA, as odor testing has not been required.</p>	<p>NA</p>
<p>EUHMAPLANT, SC V.2</p>	<p>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.</p>	<p>NA, as the AQD has not made a request for the facility to conduct testing. All testing done as of the date of this report has been required by PTI 90-21.</p>	<p>NA</p>

- 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
- NOx: 40 CFR Part 60, Appendix A
- SO2: 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 Technical Programs Unit and District Office. 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.

<p>EUHMAPLANT, SC V.3</p>	<p>Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall verify PM10, PM2.5, NOx, CO, SO2, VOC, arsenic, benzene and formaldehyde and Lead from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing for each pollutant shall be performed once every 12-month period until three consecutive tests demonstrate compliance with its applicable emission limit. The testing shall be performed using an approved EPA Method listed in the table below.</p> <ul style="list-style-type: none"> • PM10/PM2.5: 40 CFR Part 51, Appendix M • NOx: 40 CFR Part 60, Appendix A • SO2: 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 • HAPs: 40 CFR Part 63, Appendix A <p>An alternate method, or a modification to the approved</p>	<p>The facility met this requirement, conducting stack testing for these parameters on 8/31, 9/1, and 9/5/2023. The 2023 test results all passed their respective limits. As of the 7/26/2024 inspection, the 2024 stack testing was scheduled for August.</p>	<p>Yes</p>

	<p>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 Technical Programs Unit and District Office. 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.</p>		
<p>EUHMAPLANT, SC V.4</p>	<p>Within 60 days upon the initial burning of fuel oil in EUHMAPLANT, the permittee shall verify PM₁₀, PM_{2.5}, NO_x, VOC, SO₂, arsenic, benzene and formaldehyde and lead 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.</p> <ul style="list-style-type: none"> • PM: 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules • PM₁₀/PM_{2.5}: 40 CFR Part 51, Appendix M • NO_x: 40 CFR Part 60, Appendix A • SO₂: 40 CFR Part 60, Appendix A 	<p>NA, as the facility has not burned fuel oil, nor does it have a fuel oil storage tank onsite.</p>	<p>NA</p>

	<ul style="list-style-type: none">• 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• HAPs: 40 CFR Part 63, Appendix A <p>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 Technical Programs Unit and District Office. 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.</p>		
EUHMAPLANT, SC V.5	Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial	The facility met these requirements as follows:	Yes

	<p>operation, the permittee shall verify particulate emission (PM) 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 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. 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.</p>	<ul style="list-style-type: none"> • Particulate stack testing was done on 8/31/2023. • They notified the AQD in writing on 4/24/2023 of the 4/10/2023 start up. • Stack test procedures and reports were reviewed by the AQD's Technical Programs Unit. • A complete test plan was received on 6/12/2023, for the 8/31-9/5/2023 testing. • The AQD approved the final plan. • A complete stack test report was received on 11/3/2023, within 60 days of the 9/5 end date of the test. 	
EUHMAPLANT, SC V.6	<p>The permittee shall perform a visible emission observation for the drum dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing (including piles) mineral filler/aggregate; and the loading, transfer, and storage systems associated with emission control systems once every 3 hours of operation and at least once a day when EUHMAPLANT is operating during daylight hours, using a method acceptable to the AQD. If the permittee observes visible</p>	<p>The company has a Daily Visible Observation form, with fields for multiple potential emission points. The stated procedure is to "Once per day, during daylight hours, perform a documented visible emission reading of the following potential emission points. If an emission is observed then perform a 6 minute Method 9 (24 readings @ 15 sec. consecutive intervals) and</p>	Yes

	emissions, the permittee shall do one of the following:	document. Initiate corrective action.” Note: “Once per day, during daylight hours, perform a documented visible emission reading...” refers to an instantaneous reading.	
EUHMAPLANT, SC V.6.a	Perform a Method 9 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	NA, as the company has stated that there have not been any instances where visible emissions were seen.	NA
EUHMAPLANT, SC V.6.b	Determine the cause of the visible emissions and initiate prompt corrective action. A minimum of one Method 9 observation is required per day, during daylight hours. Records will include the time of each visible emissions observation and Method 9 reading, the reason if an observation or reading is not taken, if visible emissions were observed, identification of the cause, the corrective action taken, and the time of completion of corrective action.	NA, as the company has stated that there have not been any instances where visible emissions were seen.	NA
EUHMAPLANT VI.	Records shall be maintained on file for a period of five years.	The facility met this requirement by keeping records going back to the 2023 plant startup.	Yes
EUHMAPLANT, SC VI.1	The permittee shall complete all required calculations in a format acceptable to the AQD District	The facility met this requirement, as confirmed by K.	Yes

	Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.	Anderson in an 8/30/2024 email.	
EUHMAPLANT, SC VI.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.	The facility met this requirement, with the attached records showing virgin aggregate and RAP feed rate every 15 minutes. This frequency is consistent with how continuous is interpreted under various federal regulations.	Yes
EUHMAPLANT, SC VI.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:	The facility met this requirement, as records (attached) of CO monitoring data on 4/26/2024 showed all values were below 500 ppmv. Please see CO table in inspection narrative, earlier in this report.	Yes
EUHMAPLANT, SC VI.3.a	Upon start-up of each paving season.	The facility met this requirement, on 4/26/2024.	Yes
EUHMAPLANT, SC VI.3.b	Upon a malfunction of the drum dryer or its associated burner.	NA, as no malfunctions of the drum dryer or burner were reported, as of 7/26/2024.	NA
EUHMAPLANT, SC VI.3.c	After every 500 hours of operation.	NA, as the facility did not reach 500 hours of operation last year, Scott advised.	Yes

EUHMAPLANT, SC VI.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.	The facility met this requirement. Per K. Anderson, they have conducted the PM testing required by 40 CFR Part 60 Subpart A and I. The 2023 PM stack testing results were provided to the AQD and reviewed by the AQD.	Yes
EUHMAPLANT, SC VI.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 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.	The facility met this requirement, keeping records (attached) of the annual black light testing of the baghouse on 3/29/2024. CO monitoring of the burner for the drum dryer was done on 4/26/2024. Scott said that there have been no breakdowns other than the 8/30/2023 breaking of the drag slat conveyor chain.	Yes
EUHMAPLANT, SC VI.6	The permittee shall keep the following records for each calendar month that EUHMAPLANT is operated:	Please see below.	See below
EUHMAPLANT, SC VI.6.a	Identification, type and the amounts (in gallons) of all fuel oils combusted and first date of use.	NA, as no fuel oils have been combusted.	NA
			NA

EUHMAPLANT, SC VI.6.b	Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (BTU/lb) of all fuel oils being combusted.	NA, as no fuel oils have been combusted.	
EUHMAPLANT, SC VI.6.c	Tons of hot mix asphalt containing RAP produced.	The facility met this requirement, with the attached record showing RAP used for July 2026 and total tons produced that month using RAP as 32,680.69.	Yes
EUHMAPLANT, SC VI.7	The permittee shall keep daily records of the following production information for EUHMAPLANT, updated upon the start of each new blend:	Please see below.	See below
EUHMAPLANT, SC VI.7.a	The virgin aggregate feed rate.	The facility met this requirement, per the attached records taken every 15 minutes.	Yes
EUHMAPLANT, SC VI.7.b	The RAP feed rate.	The facility met this requirement, per the attached records taken every 15 minutes.	Yes
EUHMAPLANT, SC VI.7.c	The asphalt paving material product temperature.	The facility met this requirement, per the attached records taken every 15 minutes.	Yes
EUHMAPLANT, SC VI.7.d	Information sufficient to identify all ingredients of the asphalt paving material mixture. Upon start-up, the permittee shall record the initial mix design and time. When a new mix design is activated after start-up, the permittee shall	The facility met this requirement, per the attached records taken every 15 minutes.	Yes

	<p>record the time and new mix design. The permittee shall keep all records</p> <p>on file until the end of the paving season in which they were recorded and make them available to the Department upon request.</p>		
EUHMAPLANT, SC VI.8	<p>The permittee shall keep in a satisfactory manner, monthly and 12-month rolling time period emission calculation records of all criteria pollutants listed in the Emission Limit Table for EUHMAPLANT using the calculation methods in Appendix D or an alternate method acceptable to the AQD District Supervisor. If stack test results for EUHMAPLANT exist for any of the pollutants, the permittee may use those stack test results</p> <p>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 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.</p>	<p>The facility met this requirement, with the attached spreadsheet showing 12-month rolling time period values for all criteria pollutants. Stack test results were used to estimate emissions, and this is acceptable to the AQD.</p>	Yes
EUHMAPLANT, SC VI.9	<p>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</p>	<p>The facility met this requirement, keeping records of CO emissions and related production data from 8/17 and 23/2023 and 4/26/2024 in a binder in the control room. Please see attached.</p>	Yes

	them available to the Department upon request.		
EUHMAPLANT, SC VI.10	The permittee shall keep, in a satisfactory manner, hourly, daily, monthly and 12-month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request.	The facility met this requirement, with the attached hourly and monthly records and the attached spreadsheet showing 12-month rolling production.	Yes
EUHMAPLANT, SC VI.11	The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period records of the hours of operation of EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request.	The facility met this requirement, with the attached hourly, monthly, and 12-month value for hours of operation as of July 2024.	Yes
EUHMAPLANT, SC VI.12	The permittee shall monitor and record, in a satisfactory manner, the pressure drop for the fabric filter controlling EUHMAPLANT emissions on a continuous basis during operation.	The facility met this requirement, per the attached Digital Values Report taken every 60 seconds on 7/20/2024 (excerpted from a larger monthly report).	Yes
EUHMAPLANT, SC VI.13	The permittee shall record all instances of alarms for the high temperature and bag leak detection system, once the system is calibrated, for the EUHMAPLANT fabric filter system including the reason the alarm was activated and the actions taken.	NA, as there have reportedly been no instances of either the high temperature alarm or bag leak detection alarm going off.	NA
EUHMAPLANT, SC VI.14	The permittee shall keep weekly records of the RAP feed rate, including the average percent of RAP per ton of hot mix asphalt produced containing RAP.	The facility met this requirement, with the attached RAP Usage report.	Yes

EUHMAPLANT, SC VII.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 EUHMAPLANT.	The facility met this requirement, informing the AQD on 4/24/2023 in writing that trial operations commenced on 4/10/2023.	Yes
EUHMAPLANT, SC VIII.	The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:	Please see below.	See below
EUHMAPLANT, SC VIII.1	From a stack SVHMADRUM with a maximum exhaust diameter of 68 inches and a minimum height above ground of 80 feet.	The facility met this requirement, with a measured stack height of 80 feet and 2 inches and a diameter of 68 inches, as reported to the AQD during a site visit on 7/6/2023.	Yes
EUHMAPLANT, SC VIII.2	The permittee shall locate SVHMADRUM at least 255 feet from the closest property line.	The facility met this requirement.	Yes
EUHMAPLANT, SC IX.1	The permittee shall install and maintain berms, fences, windbreaks, and/or trespassing warning signage as appropriate to secure the property boundary. Within 30 days of the first operation of EUHMAPLANT, the permittee shall submit to the AQD Supervisor confirmation of installation and a diagram of the location of each method being used.	The facility met this requirement. On 4/24/2023, the AQD received written confirmation and a diagram.	Yes

EUYARD**DESCRIPTION**

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

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Controls as specified in the Fugitive Dust Control Plan in Appendix A

Compliance Check with SC of PTI 90-21, EUYARD:

PTI 90-21 SC	Requirement	Comments	Complies?
EUYARD SC I.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 visible emission opacity standard of five (5) percent opacity on a continuous basis.	The facility met this limit, using watering and other acceptable methods.	Yes
EUYARD SC I.2	The permittee shall not allow any visible emissions from any aggregate storage pile in EUYARD unless the visible emissions are the direct result of activity on the applicable pile or wind speeds of at least 12 miles per hour. The visible emissions when there is activity on the pile or the wind speeds are at least 12 miles per hour shall not exceed 20% opacity as specified in GC11 and EUHMAPLANT SC I.28 .	The facility met this requirement, as there were no visible emissions from storage piles in EUYARD.	Yes
	NA	NA	NA

EUYARD SC II.			
EUYARD SC III.1	The permittee shall not operate EUYARD unless the fugitive dust control plan specified in Appendix A has been implemented and is maintained. The permittee shall submit modifications to this fugitive dust control plan if it does not adequately control the emissions upon request of the District Supervisor. Any changes made to the fugitive dust plan must be pre-approved in writing from the district prior to implementation.	The facility met this requirement.	Yes
EUYARD SC IV.1	The permittee shall install, maintain, and operate a wind speed monitor and continuous recording system in a satisfactory manner. Satisfactory operation includes operating the wind speed monitor and recording system at all times except for the period between paving seasons when the plant is inactive.	The facility met this requirement, as the wind speed monitor was seen operating.	Yes
EUYARD SC V.	NA	NA	NA
EUYARD SC VI.	Records shall be maintained on file for a period of five years.	The facility met this requirement by keeping records going back to the 2023 plant startup.	Yes
EUYARD SC VI.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.	The facility met this requirement, as confirmed by K. Anderson in an 8/30/2024 email.	Yes
EUYARD SC VI.2	The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD for each reporting year, using emission factors	The facility met this requirement, including fugitive dust emissions in their air	Yes

	approved by the Department such as those used in MAERS or an approved PTI application using the calculation methods specified in Appendix D or an alternate method approved by the AQD District Supervisor.	emission report for the 2023 operating year.	
EUYARD SC VI.3	The permittee shall maintain a record of all activities required by the fugitive dust plan in Appendix A.	The facility met this requirement, with the Daily Road Maintenance records attached for 7/22-26/2024.	Yes
EUYARD SC VI.4	The permittee shall maintain a record of the recorded wind speeds in a format acceptable to the AQD District Supervisor and make them available upon request.	The facility met this requirement. A spreadsheet of wind speed records for each minute of 7/26/2024 is attached.	Yes
EUYARD SC VI.5	The permittee shall make available upon request by the Department the silt content for each aggregate stored onsite based on the percent by weight passing the #200 sieve.	The facility met this requirement, providing virgin aggregate silt content records on 8/30/2024 and RAP silt content records on 9/4. Please see attached.	Yes
EUYARD SC VII.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).	The facility met this requirement, including fugitive dust emissions in their air emission report for the 2023 operating year.	Yes
EUYARD SC VIII.	NA	NA	NA
EUYARD SC IX.	NA	NA	NA

EUACTANKS**DESCRIPTION**

Six 30,000 gallon liquid asphalt cement storage tanks with a total heat capacity of 2 MMBtu/hr

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Vapor condensation and recovery system

Compliance Check with Special Conditions (SC) of PTI 90-21, EUACTANKS:

PTI 90-21 SC	Requirement	Comments	Complies?
EUACTANKS, SC I.	NA	NA	NA
EUACTANKS, SC II.	NA	NA	NA
EUACTANKS, SC III.1	The permittee shall not operate EUACTANKS unless the vapor condensation and recovery system is installed, maintained, and operated consistent with manufacturers recommendations.	The facility met this requirement. There were no visible emissions or verified odors from the system, also called an absorption unit.	Yes
EUACTANKS, SC IV.	NA	NA	NA
EUACTANKS, SC V.	NA	NA	NA
EUACTANKS, SC VI.1	The permittee shall maintain records for maintenance activities on EUACTANKS consistent with the manufacturers recommendations to	NA, as the AC tanks and absorption unit were said to be so new that they have	

	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.	not needed to do any maintenance on them.	
EUACTANKS, SC VII.	NA, as there is no EUACTANKS, SC VII written into PTI 90-21.	NA, as there is no EUACTANKS, SC VII written into PTI 90-21.	NA
EUACTANKS, SC VIII.	NA	NA	NA
EUACTANKS, SC IX.	NA	NA	NA

EUSILOS

DESCRIPTION

Eight 300 ton capacity hot mix asphalt (HMA) paving material product storage silo. Flexible Group

ID:

NA

POLLUTION CONTROL EQUIPMENT

Top of silo emission controls and loadout controls

Compliance Check with SC of PTI 90-21, EUSILOS:

PTI 90-21 SC	Requirement	Comments	Complies?
EUSILOS, SC I.	NA	NA	NA

EUSILOS, SC II.	NA	NA	NA
EUSILOS, SC III.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. The permittee shall vent emissions collected from the top of the silos into a filtering system or shall control the emissions by equivalent means.	The facility met this requirement, with no blue smoke or steam escaping.	Yes
EUSILOS, SC III.2	The permittee shall not operate EUSILOS unless emissions from the load-out area are properly captured and controlled. Unless otherwise specified by the District Supervisor, proper capture includes enclosing the truck load-out area with sides that extend to five feet above the top of the road grade at the entrance to the scale and, if appropriate, include wind blocking for entrance and exit points. If the load-out area inadequately captures and controls load-out emissions, the permittee shall modify the system or operation as requested by the District Supervisor. The permittee shall vent emissions collected from the truck load-out area into a filtering system or shall control the emissions by equivalent means. Any plans considered by the permittee as equivalent means shall be pre-approved in writing by the District Supervisor. The permittee shall not operate EUSILOS unless the silo load-out control system is installed, maintained and operated in a satisfactory manner.	The facility met this requirement. During the entire inspection, only one brief puff of blue smoke or steam was witnessed leaving the tunnel, as air was displaced down the length of a Flowboy trainer which was not all the way inside the tunnel.	Yes
EUSILOS, SC III.3	The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all load-out components of EUSILOS 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 EUSILOS. Maintenance records	The company met this requirement, cleaning the blue smoke control device filters on 8/14/2024, per the attached record.	Yes

	for the load-out control 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.		
EUSILOS, SC IV.1	NA	NA	NA
EUSILOS, SC V.	NA	NA	NA
EUSILOS, SC VI.	NA	NA	NA
EUSILOS, SC VII.	NA, as there is no EUSILOS, SC VII written into PTI 90-21.	NA, as there is no EUSILOS, SC VII written into PTI 90-21.	NA
EUSILOS, SC VIII.	NA	NA	NA
EUSILOS, SC IX.	NA	NA	NA

FGFACILITY DESCRIPTION:

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Watering and cleaning of roads to control of fugitive emissions, top of silo control, loadout controls, and vapor condensation and recovery system on asphalt tanks, and fabric filter dust collector on drum exhaust.

Compliance check with SC of PTI 90-21, FGFACILITY:

PTI 90-21 SC	Requirement	Comments	Complies?
FGFACILITY, SC I.1	CO emissions limited to 89.5 TPY over a 12-month rolling time period as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling CO at 2.02 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
FGFACILITY, SC I.2	SO2 emissions limited to 89.5 TPY over a 12-month rolling time period as determined at the end of each calendar month.	The facility met this limit, with 12-month rolling SO2 at 0.56 tons as of July 2024, based on stack test data. See attached spreadsheet.	Yes
FGFACILITY, SC I.3	Each individual HAP limited to less than 8.9 TPY over a 12-month rolling time period as determined at the end of each calendar month.	The facility met this limit, with the highest 12-month rolling value for a single HAP being 0.22 tons for H₂SO₄, as of July 2024. See attached spreadsheet.	Yes
FGFACILITY, SC I.4	Aggregate HAPS limited to less than 22.5 TPY over a 12-month rolling time period as determined at the end of each calendar month.	The facility met this limit, with the highest 12-month rolling value for total HAPs being 0.89 tons, as of July 2024. See attached spreadsheet.	Yes
FGFACILITY, SC II.	NA	NA	NA
FGFACILITY, SC III.	NA	NA	NA

FGFACILITY, SC IV.	NA	NA	NA
FGFACILITY, SC V.	NA	NA	NA
FGFACILITY, SC VI.	Records shall be maintained on file for a period of five years.	The facility met this requirement by keeping records going back to the 2023 plant startup.	Yes
FGFACILITY, SC VI.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.	The facility met this requirement, as confirmed by K. Anderson in an 8/30/2024 email.	Yes
FGFACILITY, SC VI.2	The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO, SO₂, each individual HAP, and aggregate total HAPs emission calculation records using methods specified in Appendix D or an alternate method approved by the AQD District Supervisor for FGFACILITY, as required by SC I.1, SC I.2, SC I.3, and SC I.4. The permittee shall keep all records on file at the facility and make them available to the Department upon request.	The facility met this requirement, with the attached spreadsheet showing 12-month rolling time period values for CO, SO₂, and individual and total HAPs. Stack test results were used to estimate some emissions, while emission factors from the emission limit table were used for others. This is acceptable to the AQD.	Yes
FGFACILITY, SC VII.	NA	NA	NA
FGFACILITY, SC VIII.	NA	NA	NA

FG FACILITY, SC IX.	NA	NA	NA
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Compliance Check with Appendices of PTI 90-21:

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.

APPENDIX A compliance check:

Condition	Requirement	Comments	Complies?
1.	SITE MAINTENANCE	Please see below.	See below
1.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 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 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.	The company met this requirement. The AQD has observed the site's water truck in use multiple times per day. Note: A sprinkler system also waters a large portion of the truck haul route.	Yes
1.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 entering the facility of the speed limitation.	The facility met this requirement with a 5-mph speed limit, posted in multiple locations. Ajax staff have been seen calling out a repeat offender who exceeded	Yes

		this limit, warning them of possibly being banned from the site.	
1.c	The drop heights of all material transfer points and screening operations shall be minimized.	The facility met this requirement.	Yes
1.d	The permittee shall visibly monitor all potential areas of fugitive emissions including material transfer points, storage piles, loadout, and facility entrance.	The facility has met this requirement. The Daily Road Maintenance Log indicated that there were no visible emissions from roadways the week of 7/22-26/2024. The AMC Daily Visible Observation log submitted for the period 7/9-24/2024 indicated no visible emissions were observed from potential emission points of the HMA plant.	Yes
2.	MANAGEMENT OF ONSITE ROADWAYS	Please see below.	See below
2.a	All the roadways on which the HMA haul vehicles and aggregate haul trucks will travel must be paved with HMA. This includes the roadway on which the vehicles travel around the process equipment to be loaded with HMA paving materials but excludes the aggregate storage yard.	The facility met this requirement.	Yes
2.b	Any aggregate spillage on roads shall be removed immediately.	No spillage on roadways was observed.	Yes
2.c		The facility met this requirement with	Yes

	The roadway shall have rumble strips installed where vehicles exit the plant site.	rumble strips, which are watered to create a wheel wash to clean truck tires more effectively. Please see attached photo. Deposited sediment is removed from the rumble strips periodically.	
3.	ON-SITE MANAGEMENT OF HAUL VEHICLES	Please see below.	See below
3.a	INCOMING TRUCKS: All trucks entering the site to deliver aggregates will be required to have the loads covered.	The facility met this requirement.	Yes
3.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.	The facility met this requirement. A sign is posted before the site exit, and trucks were seen complying.	Yes
4.	MANAGEMENT OF FRONT-END LOADER OPERATIONS	Please see below.	See below
4.	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.	The facility met this requirement.	Yes
5.	RECORDKEEPING	Please see below.	See below
5.	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	The facility met this requirement with the attached Daily Road Maintenance record for the yard as well as roadways.	Yes

	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	Please see below.	See below
6.	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.	The facility met this requirement. No fugitive emissions from leaks or malfunctions were observed.	Yes
7.	FUGITIVE EMISSIONS FROM MINERAL AGGREGATE STOCKPILES	Please see below.	See below
7.a	Stock piling will be performed in a manner that minimizes freefall drop distance. The height of the frontend loader bucket shall be minimized to reduce the material drop height.	The facility met this requirement, as the height of the front-end loader bucket was minimized.	Yes
7.b	Piles will be maintained to prevent fugitive dust in compliance with EUYARD SC I.1.	The facility met this requirement, as no fugitive dust was witnessed from piles.	Yes

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.**

APPENDIX B compliance checklist:

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Condition	Requirement	Comments	Complies?
1.	FABRIC FILTER DUST COLLECTOR OPERATING PRESSURE DROP.	Please see below.	See below
1.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, unless a reason acceptable to the AQD has been provided, such as when a large number of filter bags have been replaced.	The facility met this requirement, continuously measuring the pressure drop, which was always above 2 inches during the inspection.	Yes
1.b	The pressure drop across the fabric filter dust collector shall be recorded continuously during operation and kept available on-site.	The facility met this requirement, per the attached Digital Values Report taken every 60 seconds on 7/20/2024 (excerpted from a larger monthly report).	Yes
2.	FABRIC FILTER DUST COLLECTOR / PLANT ALARM SYSTEM.	Please see below.	See below
2.	The fabric filter dust collector shall be equipped with a high temperature sensor and alarm system and pressure detection sensor and alarm system. The baghouse shall also be equipped with a bag leak detection system and alarm that directly monitors changes in particulate emissions. The high temperature 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. The pressure detection sensor shall be designed to set off an alarm when the pressure drop across the baghouse drops below 2 inches or raises above 10 inches. A log of all	The facility met this requirement with a high temperature sensor and alarm system as well as a pressure detection and alarm system. These were said to have never gone off and so there have been no alarm instances to document.	Yes

	alarm instances shall be maintained including the reason the alarm was activated and the actions taken.		
3.	HANDLING AND STORAGE OF FABRIC FILTER DUST.	Please see below.	See below
3.	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.	The company met this requirement by reinjecting collected dust from the baghouse back into the drum dryer. The reinjection system was free from any leaks or fugitive emissions.	Yes
4.	PIPING AND SEALS MAINTENANCE.	Please see below.	See below
4.	Piping and seals shall be replaced as needed.	NA, as piping and seals have not needed replacement, the AQD was informed.	NA
5.	VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN IN THE EVENT OF.	Please see below.	See below
5.	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 in excess of General Conditions No. 11 to verify the emission density, operations shall be ceased immediately and the cause of the visible emissions determined and corrected prior to operating the plant again. REMINDER: If the visible emissions continue for more than 2 hours, in	This was NA, as no opacity is said to have ever been observed from the baghouse exhaust stack, only steam, i.e. uncombined water vapor, which is excluded from the MAPC Rule 301 opacity limit on visible emissions.	NA

	excess of an emission standard, per Rule 912 an excess emissions report must be made to EGLE.		
6.	BLACK LIGHT INSPECTIONS.	Please see below.	See below
6.	A black light test shall be conducted at least once per year - within one week of the beginning of operation for each paving season. Black light inspection equipment and materials shall be available for use at the facility and used as needed during the paving season.	The facility met this requirement, conducting a black light test on 3/29/2024, please see attached record. No bags needed replacing. They also conducted an 8/28/2023 black light test, since the 2023 AQD inspection.	Yes
7.	INVENTORY OF FILTER BAGS.	Please see below.	See below
7.	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.	The facility met this requirement, with a reported 25-30 spare bags onsite.	Yes
8.	FABRIC FILTER DUST COLLECTOR INSPECTION RECORD.	Please see below.	See below
8.	<p>A written record in a bound notebook or digital format of the following shall be maintained by the owner or operator of the facility:</p> <ul style="list-style-type: none"> • 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; 	<p>The facility met this requirement with a notebook containing hardcopies of:</p> <ul style="list-style-type: none"> • A record of interior inspections of the baghouse (attached). • A record of black light inspections from 3/29/2024 (attached), was kept, as well 	Yes

	<ul style="list-style-type: none"> • 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. 	<p>from 8/28/2023 (attached).</p> <ul style="list-style-type: none"> • A list of the number of filter bags replaced following each inspection (0, per Baghouse Replacement Chart). • NA, as there were no damaged filter bags and therefore none were replaced. • There were copies of certified Method 9 readings conducted onsite. • NA, as there were no significant maintenance activities reported on the baghouse other than the black light testing. 	
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APPENDIX C

EMISSION ABATEMENT PLAN FOR STARTUP, SHUTDOWN AND MALFUNCTIONS

Appendix C compliance checklist:

Condition	Requirement	Comments	Complies?

NORMAL STARTUP PROCEDURE	Detailed steps for normal startup procedure.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes
NORMAL SHUTDOWN PROCEDURE	Detailed steps for normal shutdown procedure.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes
HOT STOPS – HOT STARTS	Detailed steps for hot stops – hot starts.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes
MALFUNCTION STOPS	Detailed steps for malfunction stops.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes
IDENTIFICATION OF SUPERVISORY AND MAINTENANCE PERSONNEL	Listing of supervisory and maintenance personnel.	The facility met this requirement, providing a listing to the AQD (please see attached).	Yes
DESCRIPTION OF INSPECTED ITEMS	Detailed listing of items to be inspected each morning while plant is warming up, and continuously throughout the day.	The facility met this requirement. An 8/30/2024 email from K. Anderson stated, in part, “For Appendix C, Description of Inspected items; Ajax does not voluntarily keep records for visual walk around inspections since they are not required by the permit, however everything listed under this section is looked at frequently during operations. In addition, some of the items specific to “dust” are obviously documented once per day on the Daily Visual Observation forms....”	Yes
REPLACEMENT PARTS		The facility appeared to meet this requirement, advising the	Yes

	<p>The following shall be kept in stock at all times:</p> <ul style="list-style-type: none"> • 15 bags minimum. • 5 lbs black light powder minimum. • 2 tubes of silicone caulk minimum. 	AQD that this is common practice. 25-30 replacement bags for the baghouse were said to be kept onsite.	
BAGHOUSE VARIABLES AND MONITORING	Detailed steps for baghouse variables and monitoring.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes
CORRECTIVE PROCEDURES AND RESPONSIBLE PERSONS	The startup, shutdown, and malfunction plan shall be followed to meet limits. If limits are exceeded, the plant supervisor or in their absence the plant operator shall stop plant and correct the problem immediately. MAPC Rule 912 shall be followed when abnormal conditions exist.	The facility appeared to meet this requirement, advising the AQD that this is common practice. MAPC Rule 912 has never been triggered here.	Yes
DRUM MIX AND BATCH – NORMAL STARTUP PROCEDURES	Detailed steps for drum mix and batch – normal startup procedures.	The facility appeared to meet this requirement, advising the AQD that this is common practice.	Yes

APPENDIX D

METHOD FOR CALCULATING ANNUAL EMISSIONS

APPENDIX D compliance checklist:

Condition	Requirement	Comments	Complies?
EUHMAPLANT	Detailed requirements for calculating monthly and 12-month rolling emissions (not reproduced here).	The facility met this requirement, using stack test results where pollutants had been tested, or using the emission factor/permit limit from the emission limit table at the start of PTI 90-21.	Yes
EUYARD	The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD for each reporting year using the following emission factors or alternatives approved by the Department such as those used in MAERS or an approved PTI application. (Table of optional emission factors not reproduced here.)	The facility met this requirement. Emission factors from U.S. EPA's AP-42 were used in the fugitive dust emission calculations submitted to MiEnviro for the air emissions reports for the 2023 operating year.	Yes

40 CFR Part 60, Subpart I compliance check:

Section Within Subpart I	Requirement	Comments	Conclusion
60.90(a)	The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and	This HMA plant is an affected facility, subject to Subpart I.	This HMA plant is subject to Subpart I

	weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems.		
60.90(b)	Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.	This facility is subject because it began construction after June 11, 1973.	This HMA plant is subject to Subpart I
60.91(a)	As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part. (a) Hot mix asphalt facility means any facility, as described in § 60.90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.	This facility falls under this definition and is therefore subject.	This HMA plant is subject to Subpart I
60.92	On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:	Please see below.	See below
60.92(a)	Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).	The facility met the gr/dscf limit during 2023 stack testing.	In compliance
60.92(b)	Exhibit 20 percent opacity, or greater.	The facility met this requirement, as opacity from the baghouse exhaust stack was 0%.	In compliance
60.93(a)	In conducting the performance tests required in § 60.8, the owner or operator	The AQD's TPU observed the test	In compliance

	shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).	methods in 2023 and reviewed the test report.	
60.93(b)	The owner or operator shall determine compliance with the particulate matter standards in § 60.92 as follows:	Please see below.	See below
60.93(b) (1)	Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).	Method 5 was used in 2023 stack testing. The AQD's TPU observed the testing methods and reviewed the test report.	In compliance
60.93(b) (2)	Method 9 and the procedures in § 60.11 shall be used to determine opacity.	Method 9 was used during the 2023 stack testing.	In compliance

(End of compliance checks.)

Departure:

The AQD departed the site at 11:39

AM.

Post-inspection follow-up:

- 8/30/2024: Follow-up and 2 of records requested on 8/27 were received,
- 9/3/2024: The AQD received scans of periodic Method 9 VE readings taken by Ajax personnel.
 - 9/4/2024: The AQD received RAP silt content records.

Compliance concerns:

None were identified.

Conclusion:

No instances of noncompliance were identified.



Image 1(001) : Rumble strips which have been watered to enhance effectiveness.

NAME Daniel D. Gero

DATE 9/22/2024

SUPERVISOR RB