

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

P019854238

FACILITY: Capital Asphalt		SRN / ID: P0198
LOCATION: 3888 S CANAL RD, LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: EATON
CONTACT: Ryan Thomas , Plant Operator		ACTIVITY DATE: 07/15/2020
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled, announced compliance inspection; a PCE as part of an FCE.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present (onsite and pre-inspection phone call): Ryan Thomas (plantops@capitalasphaltllc.com), Plant Operator

Purpose: Conduct an announced, scheduled, partial compliance evaluation (PCE) inspection by determining compliance with Capital (formerly Superior) Asphalt's Opt-Out Permit No. 12-11A. The facility was last inspected August 2017. Much of the PCE was conducted prior to the inspection via review of records. Onsite work was kept to a minimum due to COVID-19 risks and restrictions.

This inspection was conducted as part of a full compliance evaluation (FCE). Particular attention was paid to the blue smoke capture system and the drum mixer (fugitive dust from seals), as these were two issues within the past year that had come up from drive-by complaints; these complaints had been addressed with the company at the time of receipt, but further review of these items during the inspection was necessary to ensure compliance.

Facility Background/Regulatory Overview: Capital Asphalt (Capital) is a hot mix asphalt facility that uses both recycled asphalt (RAP) and virgin aggregate in their mixes. R. Thomas started his position at Capital Asphalt in January 2020 and said that the only modifications to the plant that he knows of is replacement of the feeder belt, the screen on the screendeck, and one of the belts to cold feeder #3.

R. Thomas said that asphalt production for the paving season for all asphalt plants generally starts at the end of April or beginning of May and usually runs through Nov 15th; however, the operating season is contingent upon the number of jobs that come in and the weather. Dave Moore, previous plant operator, had told me during the 2017 inspection that they don't like to pave in temperatures below 32°F. Operating hours also vary depending on the jobs that need to be done. R. Thomas said they typically operate from 6 a.m. to 6 p.m., although he said during peak operations they will operate until 8 p.m. Since he has worked here they have not had to operate past 8 p.m.

Capital Asphalt will have crushing companies come out a few times a year to crush concrete as well as RAP. R. Thomas said Capital sells the crushed concrete for backfill, shoulder gravel, etc. RAP is crushed for their asphalt production. R. Thomas said that Lukazcek Excavating and Drainage, LLC (P0820) came out over the winter through March 1st to crush the concrete, and they plan to have this same crushing company out again within the next 30 days to crush RAP. The AQD has not received relocation notices for either of these crushing events and as such, follow-up will be conducted with Lukazcek to address any non-compliance issues, determine the days they will be at Capital Asphalt, and if time allows, conduct an inspection of Lukazcek's operations while at Capital. R. Thomas said that Capital installed water lines for crushers to hook up to when operating their crushing plant. Custom Crushing has also been out to Capital when it was under Superior Asphalt ownership and AQD received a dust complaint from their crushing operations. It was also noted at the time of the complaint that Custom Crushing had been operating an unpermitted crusher. A violation notice was issued to address the unpermitted crusher and fugitive dust issues.

Capital Asphalt is an opt-out facility for HAPs and reports to MAERS as a Fee Category D facility.

Inspection: Prior to the inspection day, R. Thomas informed me that production would be running through 8 a.m. on July 15, 2020 and as such, I planned to arrive prior to this time to ensure I could observe onsite operations. At approximately 7:40 a.m. on July 15, 2020 I arrived onsite. The plant was operating at this time; however, I was only able to view one truck being loaded before the 8 a.m. shutdown. When I arrived onsite I called R. Thomas on the phone to inform him that I was at the facility and would be looking at the list of items we had discussed over the phone the previous day. I made no in-person contact with R. Thomas during the inspection due to COVID-19 concerns. Records were provided electronically prior to the inspection day.

Table 1 contains a list of all permitted equipment onsite.

Table 1. Permitted equipment onsite.

EU	EU Description	Compliance
EUHMAPLANT	Hot mix asphalt facility, aggregate conveyors, 400 tph capacity counterflow drum mixer with fabric filter dust collector Burns natural gas only (plant is configured to burn only natural gas)	Yes
EUACTANKS	Two side-by-side 30,000-gallon liquid asphalt tanks	Yes
EUSILOS	Two 200-ton storage silos for finished product	Yes
EUYARD	Fugitive dust sources: -Paved plant roadways - Paved plant yard -material storage piles -material handling operations (except cold feed bins)	Yes

EUHMAPLANT

This EU consists of a hot mix asphalt facility, associated aggregate conveyors and a 400 tph-capacity counterflow drum mixer with fabric filter dust collector. EUHMAPLANT was operating while I was onsite. The HMA plant is fired on natural gas only, and therefore all permit requirements addressing RUO or other types of fuel do not apply at this time.

I did not observe any signs of opacity from the baghouse, only steam.

Emission Limits, Testing/Sampling & Monitoring/Recordkeeping

Stack testing was required to be conducted for PM (gr/dscf per NSPS Subparts A & I and lb/ton), CO, SO₂, NO_x, and lead. Stack testing was conducted in November 2013 to verify emission rates of CO, PM, SO₂, NO_x and lead while combusting natural gas only. Emissions for each pollutant were verified in compliance with their respective emission limits. Table 2 contains the stack test emission rates for these criteria pollutants.

Table 2. November 2013 Stack Test Results (as reported in January 2014 test report)

Pollutant	Avg Tested Emission Rate (lb/ton)	Permit Limit (lb/ton)
PM	0.0017	0.05
SO ₂	0.01	0.18
NO _x	0.03	0.20
CO	0.09	0.20
Pb	7.41E-06	1.5E-05
PM (NSPS Subpart I)	0.0019 (gr/dscf)	0.04 (gr/dscf)

Capital is required to calculate emissions for all toxic air contaminants (TACs) and criteria air pollutants listed in the Emission Limit Summary Table of their PTI on a monthly and 12-month rolling basis. If stack test data is not available for emissions calculations, Capital must calculate emissions based on the applicable emission factors presented in the Emission Limit Table of PTI 12-11A. There is no stack test data available for TAC emissions. Capital keeps track of the monthly and 12-month rolling emissions for all criteria pollutants and TACS. I verified that the emission factors for criteria pollutants were based on the stack test results, and that the TAC emissions (for which there is no stack test data) were based off of the permit limits, as required. Capital Asphalt has only been burning natural gas, thus the natural gas-based stack test results for criteria pollutants represents current operations and emissions. Tables 3 and 4 contain the highest reported 12-month rolling emissions for each criteria pollutant and TAC (respectively), as determined at the indicated month's end for January 2019 – May 2020 records (all data is attached to this report).

Table 3. 12-month Rolling Criteria Air Pollutant Emissions

Pollutant	12-month rolling Emissions (tpy)	Criteria Pollutant Emission Limit (tpy)	Compliant?
PM	2.12 (Jan – Mar 2019)	22.4	Yes
SO₂	0.4	80.6	Yes

	(Nov 2019 – Apr 2020)		
NOx	1.3 (Nov 2019 – Mar 2020)	89.5	Yes
CO	8.48 (Jan – Mar 2019)	89.5	Yes

Table 4. 12-month Rolling TACs/HAPs Emissions

Pollutant	12-month rolling Emissions (tpy)	Compliant?
Pb	6.4E-4 (Jan – Mar 2019)	Yes
Mn	1.3E-3 (Jan 2019 – Mar 2020)	Yes
Ni	1.1E-2 (Jan 2019 – Mar 2020)	Yes
Benzene	3.6E-2 (Jan 2019 – Mar 2020)	Yes
Ethyl benzene	2.3E-2 (Jan 2019 – Mar 2020)	Yes
Toluene	2.7E-1 (Jan 2019 – Mar 2020)	Yes
Xylene	1.9E-2 (Jan 2019 – Mar 2020)	Yes
Acrolein	3.4E-2 (Jan 2019 – Mar 2020)	Yes
Formaldehyde	2.9E-1 (Jan 2019 – Mar 2020)	Yes
Naphthalene	5.9E-2 (Jan 2019 – Mar 2020)	Yes
H ₂ SO ₄	6.8E-1 (Jan 2019 – Mar 2020)	Yes
HCl	1.0 (Jan 2019 – Mar 2020)	Yes
As	6.4E-5 (Jan 2019 – Mar 2020)	Yes
(FGFACILITY) Total Aggregate HAPs	1.8 (Jan 2019 – Mar 2020)	Yes

TAC Emissions and FGFACILITY

FGFACILITY takes into account all emissions sources and restricts HAP emissions to 9.0 tpy for each individual HAP and 22.5 tpy for aggregate HAPs. The HAPS regulated under this permit are all pollutants listed in the emission unit summary table, except for the criteria air pollutants CO, NOX, PM, and SO₂. As documented in Table 4, from 12-month rolling data, as determined at the end of January 2019 – June 2020, total aggregate HAPs was 1.8 tons and individual HAPs were each less than 9.0 tons per year and therefore Capital is in compliance with FGFACILITY emission limits at this time.

The permit allows AQD to require verification and quantification of odor emissions from EUHMAPLANT. During the inspection, I detected odors within the level 1 – 2 range, particularly while the one truck was being loaded. Because the AQD has also not received any odor complaints associated with this facility and because the odors onsite did not seem objectionable it is my professional opinion that odor testing is necessary at this time.

Material Limits & Recordkeeping

Capital is only permitted to burn natural gas, propane, fuel oils 1-6, or recycled used oil (RUO), and the % sulfur, specific gravity, flash point, and higher heating value of all fuel oils combusted must be recorded monthly. Records indicate that only natural gas has been combusted in the plant and I confirmed with R. Thomas that only natural gas is combusted. To use RUO, he stated, the plant would have to undergo a major conversion in order to burn these other types of fuel.

Capital shall not use any asbestos tailings or waste materials containing asbestos in their HMA. While onsite I noted there seemed to be a large pile of what looked like construction debris (concrete with other miscellaneous items mixed in). R. Thomas explained that they receive concrete, but trash also ends up in the pile as well from the companies that provide the

concrete. R. Thomas said that they sort the concrete pile by removing the trash and then dispose of the trash in an ordered dumpster to be disposed of properly. He said there is no asbestos in this pile and the concrete that is free of garbage gets crushed.

Capital's asphalt mixture is limited to a maximum of 50% RAP, based on a monthly average, in addition to 895,000 tons of hot mix asphalt (HMA) paving materials per 12-month rolling period, and no more than 400 tons of HMA paving materials per hour, based on a daily average (daily HMA production divided by daily operating hours). Records are required to demonstrate compliance with these limits.

R. Thomas provided me with electronic records to check compliance with these Material Limits for the 2019 and 2020 operating seasons, as requested. R. Thomas verified that Capital only uses RAP in their asphalt mixes and said that they have no plans to do any crumb rubber or recycled asphalt shingle (RAS) work this operating season. Per the electronic records, attached, the highest monthly average amount of RAP Capital has used in their asphalt in 2019 was 22% (May 2019) and in 2020 was 25% (April 2020). Capital keeps track of the total HMA produced that contains RAP and the Total RAP aggregate used on a daily basis to calculate the monthly average percent RAP in the mixture.

The total tons of HMA produced is limited to 895,000 per 12-month rolling time period. I reviewed the 12-month rolling totals, as determined at the end of each calendar month, from January 2019 – June 2020. The highest 12-month rolling HMA production total was 88,177 tons for the 12-month period of November 2018 – October 2019.

There is a 400 ton/hr HMA limit, based on a daily average. D. Moore, during the 2017 inspection, said Capital usually operates at approximately 200 tph, and could operate faster if they had to, but they only have 2 silos for storage and therefore would not have the capacity to store HMA at the 400 tph production permit limit. R. Thomas verified that from a practical standpoint, they would not reach that 400 tph capacity, and have not reached a production rate of 150 tph so far this operating season. He said that the operating rate they are at right now is typical for their company.

For the purposes of this permit, compliance of this condition is checked by averaging the daily production of HMA over the operating hours for the day to determine if Capital is in compliance with the hourly limit. Capital tracks both total HMA produced and hours of operation on a daily basis to determine compliance with the 400 ton/hour limit. Per the 2020 operating season electronic data provided by R. Thomas, the highest hourly HMA produced through June 2020 was 145.7 tph on 6/24/20.

On September 16, 2019, AQD received an anonymous complaint of black and yellow smoke coming from the asphalt drum dryer. See complaint no C-20-00652 for further details. I called Dave Moore, Plant Manager at the time, who stated that they were "running hard" which caused "dust" to blow out of the RAP ring (where the dust and RAP come into the drum) on the drum. He described "running hard" as running 290 tons per hour or more, and they were running at that rate for the entire day. I discussed this issue further with R. Thomas prior to the inspection who explained that if dust is coming out of drum it means the baghouse bags are getting overwhelmed largely because there is not enough air flow through the system. Slowing down the production per rate will allow more air into the system and allow dust generation to slow down. If there is too much material in drum, it overloads what the exhaust fan can handle, and the dust will go to every crack it can find. The more moisture there is in material, the slower you have to run the mix in order to efficiently dry it well enough to get material hot enough. R. Thomas' explanation in addition to D. Moore's explanation suggest that even if the plant is not running at a max capacity of 400 tph, there is a possibility of fugitive dust through drum seals if there is too much moist material being processed in one batch. R. Thomas is now aware of this incident and understands the need to ensure that fugitive dust is not generated in this manner going forward. Capital Asphalt is in compliance with all material limits at this time.

Process/Operational Restrictions & Monitoring/Recordkeeping

The Fugitive Dust Control Plan for EUYARD in Appendix A for of the permit is required to be implemented and maintained if Capital wishes to operate the plant.

The following is an evaluation of compliance with the Fugitive Dust Control Plan for EUYARD:

SITE MAINTENANCE

Dust on all areas where there is vehicular traffic is required to be controlled by water, sweeping, vacuuming or other acceptable control methods, and should be done a minimum of 2 times per month or more frequently depending on weather conditions, spills, and vehicular activity.

R. Thomas said that the whole facility is paved, including underneath the stock piles. They own a water truck and a loader to spread water prior to sweeping every day, once per day at a minimum, and usually occurs around 2 pm every afternoon and then again at 6 pm at night. Sweeping is conducted via a broom tractor.

While onsite, I noted that all paved surfaces appear to have been kept relatively dust-free. I observed loader traffic and did not see opacity in excess of 5% opacity. Portions of the paved yard near the stock piles appeared to have watered,

as puddles were present.

Capital is required to have speed limit signs of 10 mph or less. There are 10 mph signs posted at the entrance of the facility, as well as throughout the plant yard.

Piles are required to be maintained to prevent fugitive dust. R. Thomas explained that storage piles don't generate - uch, if any, fugitive dust to present the need to water them. I did not observe any opacity from the stock piles during the inspection.

According to weather underground, the wind speeds were approximately 7 mph out of the south during the inspection.

All roadways are clean of spillage or any other dust that would have the potential to be re-entrained into the air as a result of truck traffic.

MANAGEMENT OF ON-SITE ROADWAYS

Compliance with the conditions for this section of the fugitive dust control plan are addressed under the "Site Maintenance" discussion.

ON-SITE MANAGEMENT OF HAUL VEHICLES

All trucks entering the site to deliver loads and all trucks leaving the site with HMA paving materials are required to cover the loads. A sign for the trucks leaving the site is also required to remind them to tarp the loads prior to leaving the site.

There is a sign at the exit of the plant "PLEASE TARP LOAD" that reminds all trucks leaving the site to cover their loads. I did not have the opportunity to observe that the one truck being loaded during the inspection had covered their load.

MANAGEMENT OF FRONT-END LOADER OPERATIONS

Capital is required to avoid the overfilling of the loader bucket and the feed hoppers to prevent spillage and to also minimize the drop height of the material when loading the feedhoppers or transferring material to stockpiles. I did not observe any front-end loaders loading hoppers, but did note that all hoppers were kept below the top edge of the hopper. I observed a front end loader transferring small amounts of materials between storage piles. Drop distances were minimized and I did not observe any fugitive dust from these activities.

Superior Asphalt is currently in compliance with their Fugitive Dust Control Plan at this time.

The Preventative Maintenance Program for the fabric filter dust collector (Appendix B in permit) is required to be implemented and maintained if Capital Asphalt wishes to operate the plant, and maintenance records for these activities in Appendix B are required to be kept.

The following is an evaluation of compliance with the Preventative Maintenance Program (Appendix B) for the fabric filter control system:

FABRIC FILTER DUST COLLECTOR OPERATING PRESSURE DROP

The fabric filter dust collector pressure drop is required to be recorded once per day, but continuously measured. The acceptable pressure drop range should be no less than 2 in H₂O and no greater than 10 in H₂O. Review of the 2020 operating season records (through June 25, 2020) for this inspection, indicate that the pressure drop was maintained between this range, with the pressure drop never getting higher than 3.6 or lower than 2.9. R. Thomas said that they record two pressure drop readings per day, one reading an hour into the first mix of the day, and an hour before operations end for the day. The pressure drop is monitored continuously via computer program. During the inspection, R. Thomas took a photo of the computer interface containing most operating data. See attached photo. The pressure drop at 7:15 a.m. on 7/15/20, per R. Thomas' computer screen read 3.17 in H₂O for pressure drop (BHP), within the appropriate operating range.

FABRIC FILTER DUST COLLECTOR/PLANT ALARM SYSTEM

A high temperature sensor and alarm system should be equipped on the fabric filter dust collector that is designed to set off an alarm when the high temperature set-point has been reached, which should begin immediate sequential shut-down if the situation is not resolved within 5 minutes after the alarm sounds. R. Thomas said the high temperature set point is 385°F. If the baghouse temperature hits 385°F, the system goes into automatic low fire mode. If it reaches 400°F, it will stack out (reach its high temperature limit) and the burner is turned off. He said that 400°F is the "safe limit," but that the baghouse temperature never gets that hot. He said the bags in the baghouse are capable of withstanding 500°F before breakdown occurs. The temperature during the inspection was provided by R. Thomas via photos: 235.9°F.

R. Thomas said he tests the high temperature alarm system a couple of times throughout the year: at the beginning of the season and then again in August, and sometimes October, to ensure the system is working. Production does not occur during these checks, but the system is heated to the high temperature setpoint to ensure the system shuts down properly.

HANDLING AND STORAGE OF FABRIC FILTER DUST

Fabric filter dust is required to be disposed of in a manner that minimizes introduction of the particulate to the outer air. R. Thomas said that Capital uses a closed system: all dust collected is sent back through the process to be used. They do not dispose of any particulate.

VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN

R. Thomas said that he monitors the exhaust from the stack on a daily basis. He said if they see VE's emitting from the stack, they shut down the plant and black light inspect the baghouse. R. Thomas verified that he has seen no visible emissions from the discharge point of their stack since operations began, only steam, and therefore there were no records of visible emissions documentation.

BLACK LIGHT INSPECTIONS

A black light test is required to be conducted at least once per year before operations for the paving season begin. Operations, according to the Daily Production Log, started 4/20/2020. A black light test is a test where black light-reactive dust is injected into the system, and using a black light, operators are able to determine if the black light-reactive dust is escaping the baghouse, thus detecting any baghouse leaks. R. Thomas said they conduct a dry run (no production) to make sure the burner lights and everything works. During the black light test he fires the burner and warms up the system slightly (not as warm as 8 hours of production) and with the burner operating and the exhaust fan on (to pull air through the baghouse) the black light test is conducted. For this paving season, a black light inspection was conducted on 3/26/20 at 10 a.m., prior to operations starting for the season. R. Thomas noted that none of the bags needed attention or replacement, there were no leaks.

INVENTORY OF FILTER BAGS

A minimum of 15 fabric filter bags are required to be maintained in inventory onsite or be available to the site within a day. R. Thomas said he has 1 case of filter bags onsite. Each case contains 20 filter bags.

The Emission Abatement Plan for Startup, Shutdown and Malfunctions (Appendix C of PTI 12-11A) is required to be implemented and maintained if Capital Asphalt wishes to operate the plant. This Appendix does not require recordkeeping; however, I went through the items in this Appendix to verify that Capital Asphalt does these items:

Daily walk-through inspection

- Roadways (fugitive dust)
- Cold feed bins (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 hoppers (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)

R. Thomas said the loader operator responsible for these items. He said the operator conducts a daily walkthrough 8-10 times per day. Upon Initial startup the operator walks the entire plant, and then throughout day, which includes going to the top of the plant 1-2 times per day to observe the plant. He fills the feeder bins, watches the plant run, inspects the plant. This includes the following: Cold feed bins, baghouse, the moving parts, bearings, and drum dryer.

- Inspection during winter shut down (PTI assumes winter shutdown is between December 1 and April 1):
- Cold feed bins (seals & belts rollers)
- Belt lines (belts & 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)

R. Thomas said 99% of the above list is done between November and March 1st. The drum dryer is inspected internally and externally for wear and tear; silos are inspected internally and externally for wear and tear; the elevator that takes mix to silos and the baghouse and feeder bins, all inspected for wear and tear. This includes seals, bearings, and any moving parts.

- Baghouse Inspection - required to be conducted every spring before paving season starts
- Inspection from inlet to exhaust and the fan
- Ductwork (unusual wear or wear patterns/will it last for the season)
- Blow pipes, diaphragm valves (are they working, good connections?)
- Bags and cages (donation of bags, age, number replaced during last season)
- Dust screws (shaft seals and screw cover doors)

R. Thomas said the auger that collects all dust from the bags and back into the drum was replaced. All walls, doors, and seals on the baghouse were inspected. The black light test for leaks was conducted, R. Thomas said they also

conduct a visual inspection through the bottom of baghouse to check out the components seen from that vantage point.

- Replacement Parts:
- Black light powder (a minimum of 5 lbs or number recommended for square feet of baghouse cloth)
- Thomas says they have 3 pails, roughly 5 lbs each.
- Silicone caulk for minor leaks around doors and seals (2 tubes min)
- R. Thomas says they have 6-8 tubes of caulk onsite.

The Compliance Monitoring Plan for RUO (Appendix D of PTI 12-11A) does not apply because Superior Asphalt does not burn RUO at this time.

Capital is required to fine-tune the drum mix burners for proper burn operation to control CO emissions, and shall do this at the start of each paving season, upon a malfunction of the plant as determined by the CO emission data, and every 500 operating hours. CO emission readings are required to be taken 8 times throughout a period of 30 minutes or more, and must remain under 500 ppmv. R. Thomas had run several CO emissions tests during the month of July, with 0 ppm registering on the CO measuring instrument. I informed R. Thomas that there should be some CO emissions if the plant is operating. He worked with the manufacturer and was able to get the instrument working. R. Thomas provided me with the attached CO records which contain the date, time, and CO in ppm of each reading. Twelve readings were conducted during a period of approximately 1 hour. All ppm readings were under 60 ppm. I have asked that R. Thomas confirm with the manufacturer that these CO readings fall within a range one would expect CO to be at for natural gas-fired plants because during the 2017 inspection the CO ppm was upward of 200 ppm.

Design/Equipment Parameters

Capital is required to install, maintain and operate the fabric filter dust collector in a satisfactory manner, which includes operating it within a pressure drop range of 2-10 in. H₂O. This was addressed previously in the Appendix B Preventative Maintenance Plan discussion. Capital is in compliance with this requirement.

Stacks

The stack height is required to be a minimum of 60' from ground level. D. Moore verified during the previous inspection that the stack height was 60'.

EUYARD

Fugitive dust emissions from the plant roadways, plant yard, material storage piles, and material handling operations (excluding the cold feed aggregate bins) are required to be calculated annually for MAERS. Based on the 2019 MAERS reporting year year, Capital is in compliance with this condition. (Emissions reported under "EUYARD").

Capital is also required to follow the Fugitive Dust Program in Appendix A. Per the analysis under "Process/Operational Restrictions" of EUHMAPLANT, Capital is in compliance with this condition as well.

EUACTANKS

The two asphalt cement (AC) tank vapor condensation and recovery systems are required to be maintained and operated in a satisfactory manner. D. Moore explained, during the 2017 inspection, that they know they need to change the steel wool condensing material when smoke is visible coming from the exhaust point of the tank during loading of the AC into the tanks. There was no loading of AC into the tanks during the inspection to verify these were being maintained in a satisfactory manner. I did not see any smoke emitting out of either of the AC tanks.

EUSILOS

EUSILOS refers to the HMA paving material storage silos. D. Moore said, during the 2017 inspection, that these are not heated, but they are insulated. He said the mix entering the silos is approximately 330-340°F and can remain in the silos overnight at a temperature warm enough that allows it to be maintained in a malleable and saleable state.

The emission capture system for the top of each storage silo is required to be installed, maintained and operated in a satisfactory manner. Additionally, the loadout area is required to be permanently enclosed except for the truck entrance and exit points. Emissions collected from the truck load-out area are to be vented into the burning zone of EUHMAPLANT or controlled by equivalent means. The load-out control system is also required to be installed, maintained, and operated in a satisfactory manner.

R. Thomas said there are 2 fans: one for the top of the silos that pulls blue smoke/fumes from the top of the silos and conveyor system back to the burning zone of the asphalt plant and another for truck loadout, both of which he said operate at maximum capacity. The truck loadout fan draws blue smoke from the loading of asphalt into trucks and pulls it through a blue smoke control system that is vented to ambient air. He said that the silo emissions capture system at the top of the silos is not air-tight. During the inspection I observed wafts of blue smoke emitting from the tops of the silos occasionally. R. Thomas said because the capture system is not air-tight, blue smoke will be emitted off the tops of the silos when asphalt mix is added to the silos as the result of air displacement. He said that mix is added to the silos every 3 minutes. I noted that the

blue smoke was not continuous in nature, but did appear to be emitted every few minutes, and only minimally. It is my professional judgement based on my observations and R. Thomas' explanation of the capture system that they are maintaining and operating the system in a satisfactory manner.

The truck being loaded out during the inspection was a small dump truck, where the top of the truck was approximately 10 feet below the side flaps that enclose the loadout area. As observed during previous inspections, larger trucks close that gap. Future observations are necessary while in the area, or during future inspections, to observe both large and small trucks being loaded out and to observe the extent of which each is controlled by the loadout control system. Future observations of loadout control in addition to any complaints the AQD may receive will provide enough information to make a decision on whether or not the side panels should be lowered in order to increase control efficiency.

Capital Asphalt appears to be in compliance with all EUSILOS conditions at this time.

Compliance Statement: Capital Asphalt is in compliance with PTI 12-11A at this time.

NAME Michelle Luplow

DATE 7/22/20

SUPERVISOR B.M.