

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

B159741325

FACILITY: Ace-Saginaw Paving Co. Plant 3		SRN / ID: B1597
LOCATION: 4190 JIMBO DR, BURTON		DISTRICT: Lansing
CITY: BURTON		COUNTY: GENESEE
CONTACT: David L. Gohn , Plant Operations Manager		ACTIVITY DATE: 08/31/2017
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, scheduled inspection, and review of facility recordkeeping, conducted as Partial Compliance Evaluation (PCE) activities, part of a Full Compliance Evaluation (FCE)..		
RESOLVED COMPLAINTS:		

On 8/31/2017, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an unannounced, scheduled inspection of Ace-Saginaw Paving Company Plant 3, in Burton, and conducted a review of recordkeeping and facility logs. These were Partial Compliance Evaluation (PCE) activities, done as part of a Full Compliance Evaluation (FCE). .

Environmental contact::

David L. Gohn, Plant Operations Manager; 810-614-4959; dgoohn@edwclevy.net

Facility description:

This is a brand new Hot Mix Asphalt (HMA) plant, which was installed this spring, at the site of an existing dual drum HMA plant.

Emission units:

Emission Unit ID	Emission Unit Description	Permit to Install (PTI) No.	Federal regulation	Compliance status
EUHMAPLANT	Hot Mix Asphalt (HMA) facility including: aggregate conveyors, 500 ton per hour counterflow drum, knockout box, fabric filter dust collectors	128-73F	40 CFR Part 60, Subpart I	Compliance
EUYARD	Fugitive dust sources including: Plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins)	128-73F	40 CFR Part 60, Subpart I	Compliance
EUACTANKS	Liquid asphalt cement (AC) storage tanks	128-73F	40 CFR Part 60, Subpart I	Compliance
EUSILOS	HMA paving material product storage silos	128-73F	40 CFR Part 60, Subpart I	Compliance

Regulatory overview:

On 1/22/2016, the company received Permit to Install (PTI) No. 128-73F, to install a new HMA plant, equipped with a counterflow drum dryer, knockout box, baghouse, virgin and RAP aggregate handling and feed systems, liquid AC storage tanks with condensers, covered drag slat conveyor, HMA product storage siloes, top of silo control, truck loadout enclosure, and blue smoke control system. This PTI is an opt-out permit, because it limits the facility's Potential to Emit (PTE) to below 100 TPY of each criteria pollutant, to keep it from becoming a major source, opting out of the Title V program..

A major source has the Potential to Emit of 100 TPY of one or more of the criteria pollutants: carbon monoxide (CO), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2), Volatile Organic Compounds (VOC), particulate matter (PM), particulate matter smaller than 10 microns (PM-10), particulate matter smaller than 2.5 microns (PM2.5), and lead. The company chose to limit potential emissions by restricting the annual production allowed by their PTI, while burning specified fuels. The current PTE for this facility is listed in the table below:

Criteria pollutant	Allowable TPY
CO	80.5
NOx	37.1
S02	16.5
VOC	15.3
PM	4.1
PM-10	5.8
PM2.5	1.4

Lead does not have the PTE to reach major source levels for this facility.

Fee status:

This facility is considered a Category II fee source, because it is subject to a federal New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities*. It is not considered a category I fee source, because it is neither a major source for criteria pollutants, nor for HAPs. It is not considered a category III fee source, because it is not subject to one of the National Standards for Emissions of Hazardous Air Pollutants (NESHAPs).

The facility is required to report air emissions to AQD annually, through the Michigan Air Emissions Reporting System (MAERS).

Location:

The facility is located in an industrial park. However, there may be one residential property, combined with a business, about 1,000 feet to the east of the HMA plant. Otherwise, the nearest residences are about 1,600 feet to the south southeast of the plant.

Recent history:

The HMA plant which operated at this site for decades has been removed from the site. The brand new plant was installed during the spring. Today was the first time that AQD staff have witnessed this plant operating. Stack testing has been scheduled for 7/20 and 7/21/2016, for CO, particulate matter, and opacity.

Stack testing:

Stack testing for CO, NSPS particulate matter, and opacity was done on 7/20-21/2016, while burning natural gas and RUO. The facility was in compliance with permitted limits. The CO results, which averaged 0.13 lb/ton while firing RUO, complied with the permitted limit for CO while firing RUO of 0.201 lb/ton. The particulate results were 0.006 grains/dscf, and 0.004 lb/ton, below the NSPS limit of 0.04 grains/dscf, and below the permitted limit of 0.03 lb/ton, respectively. Opacity readings were all 0%, complying with the limit in the NSPS of 20% and with the 20% except for one 6-minute average per hour not to exceed 27% opacity limit of Michigan Air Pollution Control Rule 301.

Odor evaluation:

I checked for odors downwind. Weather conditions were partly sunny, hazy, and 66 degrees F, with winds out of the north northeast.

- 11:18 AM: a level 1 asphaltic odor was detected on S. Dort Highway, south of the plant's location, and just north of E. Maple Avenue, . I was approximately 2,000 feet to the south southwest of the plant.
- 11:23 AM, a level 1 asphaltic odor was detected at the intersection of S. Dort Highway with E. Maple Avenue, along with a level 1 plastic odor. The plastic odor I did not believe to be associated with Ace-Saginaw Paving Co., but with one of the other industries in the area.
- 11:24 AM, a level 1 solvent odor was detected on S. Dort Highway, south of the intersection with Bristol Road. I did not believe this to be associated with Ace-Saginaw paving Co., but with one of the other industries in the area.

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 odors which I had detected above were determined to be insufficient to constitute unreasonable interference with the comfortable enjoyment of life and property.

Arrival:

This was an unannounced inspection. I arrived at 11:28 AM, and the plant appeared to be running. I drove on the truck entrance route through the site, which is one way. It is my understanding that this is the path all visiting vehicles should take through the site. I parked adjacent to the control tower. Mr. Wes Guigar was the plant operator. Mr. Matt Hugo, the previous operator, has left the company, I was informed. I advised Mr. Guigar of the level 1 asphalt odors detected offsite, but indicated that these were not enough to constitute a nuisance.

Inspection:

The plant was operating, while I was onsite. Operating data was collected, as follows:

Time	11:35 AM	11:58 AM	12:26 PM
Mix	8A-1850	8A-1850	13A
Grade liquid AC	64-22 PG	64-22 PG	64-22 PG
% mix AC	5.5	5.8	5.7
Production rate TPH	267	285	290
Virgin aggregate TPH	169.1	186.9	214.1
Virgin agg. % moisture	4.4	4.4	4.4
RAP TPH	82.3	86.9	73.4
RAP % moisture	3.5	3.5	3.5
RAP % of total mix	30.8	30.5	25.3
Liquid AC TPH	11.3	12.3	12.7
Liquid AC temperature deg. F	318.4	306.7	302.3
Mix temperature deg. F	317.7	310	320.4
Draft through drum dryer " w.c.	0.2	0.2	0.2
Baghouse temperature deg. F	282	290	193.9
Baghouse pressure drop " w.c.	3.1	3.0	2.8
Stack temperature deg. F	249	254	251
Draft to storage silos, " w.c.	-0.8	-0.8	-0.8

it is my understanding that Ace-Saginaw does not use any shingle material in their paving mixtures.

A knockout box is used as a gravity collector, to remove coarse particulates from the exhaust stream, prior to the baghouse. I checked for visible emissions from the baghouse exhaust stack periodically during the inspection, but there were none, other than steam. It is my understanding that the baghouse has 1,300 bags, of a style called "two pocket" bags, and the draft through the drum dryer is 1,700 cfm. It is my understanding that a reverse air cleaning mechanisms is used to clean the bag, to remove collected dust, and that the collected dust is reinjected as fines back into the product mix, in the drum dryer.

Fugitive emissions check

Potential emission source	Fugitive emissions?
Drum dryer	No
Burner end of drum	No
Virgin aggregate conveyor	No
RAP conveyor	No
Ductwork	No
Baghouse	No
Dust reinjection system	No
Liquid AC tanks	No
RUO tank	No
"Tack" tank	No
Drag slat conveyor (enclosed)	No*
Storage silos	No
Truck loadout	Yes, but minor

*Mr. Guigar pointed out a tear in a rubber boot on the duct which carries captured emissions from the drag slat conveyor to the drum dryer. He explained this happened yesterday, and they have already cut out a replacement piece of rubber into the proper size and shape. It is my understanding that this will be installed soon, on a day with rain or low production.

Most of the roadways at the site are paved. Around the aggregate storage piles are unpaved roadways. There was some fugitive dust from a front end loader moving around these piles and up to the virgin aggregate feed system. I advised applying water or calcium chloride. I was told that they typically apply calcium chloride twice per month.

Mr. David Gohn, Plant Operations Manager, was not onsite at this time, but assisted AQD by providing digital copies of facility recordkeeping, in response to a request for records which I made by e-mail, after the inspection.

A compliance check with the Special Conditions of PTI No. 128-73F follows.

Special Conditions for EUHMAPLANT:

I. EMISSION LIMITS

Emission limits are specified in a table for PM, PM10, CO, SO2, NOx, lead, formaldehyde, 2-Methyl-1-Pentene, and hydrogen chloride. The facility underwent stack testing on 7/20 and 7/21/2016, for CO, particulates, and opacity, while burning Recycled Used Oil and natural gas. The results were well within permitted limits for CO, particulates, and opacity.

II. MATERIAL LIMITS

1. The facility is prohibited from burning any fuel other than natural gas, liquid petroleum gas, ultra low sulfur diesel, or recycled used oil (RUO) in EUHAMPLANT. The facility was burning natural gas, at this time, but RUO was onsite and was available for use as fuel, I was informed.
2. The permittee is prohibited from burning in EUHAMPLANT any hazardous waste, blended fuel oil or RUO containing any contaminant that exceeds the following concentrations or for which the flash point, or ash content, vary from the standards in the following table.

Contaminant	Limit	Units
Arsenic	5.0	ppmw
Cadmium	2.0	ppmw
Chromium	10.0	ppmw
Lead	100.0	ppmw
PCBs	1.0	ppmw
Total Halogens	4000.0	ppmw
Sulfur	1.5	Weight %
Minimum Flash Point	100.0	Deg. F
Maximum Ash Content	1.0	Weight %

Attached to this report are the results from lab analyses of three RUO samples which an Ace-Saginaw Paving CO. employee, Ted, collected today, while I observed. The lab results for all three samples show compliance with the permitted limits for arsenic, cadmium, chromium, lead, PCBs, total halogens, % sulfur, and minimum flash point. The contracted lab AQD uses for RUO samples, Merit Laboratories, is unable to do ash analysis on liquid samples, I was informed in 2016. The sample results are discussed at the end of this report.

3. The permittee is prohibited from using any asbestos tailings or waste materials containing asbestos. It is my understanding that they do not use any asbestos tailings or any waste materials containing asbestos.

4. The RAP content of the asphalt mixture is limited to a maximum of 50% RAP, based on a monthly average. The RAP content today ranged from 25.3 to 30.8%, instantaneously, well below the 50% limit.

5. Production is limited to no more than 800,000 tons of HMA in EUHAMPLANT per 12-month rolling time period, as determined at the end of each calendar month. Total production for 2016 was 297,874 tons, well below the permitted limit.

6. While combusting diesel fuel (ultra low sulfur diesel fuel) or RUO, the facility is limited to no more than 550,000 tons of HMA production per 12-month rolling time period, as determined at the end of each calendar month. 2016 production while burning RUO as fuel was 69,108 tons, well below the permitted limit.

7. The plant is prohibited from a production rate of more than 500 tons per hour (TPH) of HMA, based on a daily average, to be determined by dividing the daily HMA production by the daily operating hours. The instantaneous production rates I recorded during the inspection ranged from 267 to 290 TPH, well below the permitted maximum.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The facility is required to implement and maintain the Fugitive Dust Control Plan for EUYARD, specified in Appendix A of the PTI. It appeared that the facility was following their fugitive dust plan appropriately.

2. The permittee is required to implement and maintain the Preventative Maintenance Program specified in Appendix B of the PTI. It is my understanding that they are implementing and maintaining this. Attached to this inspection activity report is an example of the baghouse inspection log.

3. The permittee is required within 60 days of permit issuance to submit an emission abatement plan for startup, shutdown, and malfunctions of equipment contained in EUHMAPLANT. The company submitted an emission abatement plan on 8/23/2016.

4. The permittee is required to implement and maintain the Compliance Monitoring Plan (CMP) for RUO specified in Appendix C of the PTI, or an alternate approved plan. It is my understanding that they follow this.

5. The permittee is require to maintain the efficiency of the EUHAMPLANT drum mix burner(s), to control CO emissions, by fine tuning the burners. This is to be done at the start of the paving season, or upon a malfunction of EUHMAPLANT as shown by the CO emission monitoring data. Please see below, for CO readings.

Out of their CO recordkeeping, I was shown an example of data which was collected on 8/10/2017, and read as follows:

CO reading #	Co reading, in ppm
1	336
2	320
3	311
4	330
5	396
6	396
7	398
8	396

TPH: 300
 Mix code: 1850

IV. DESIGN/EQUIPMENT PARAMETERS

1. The fabric filter dust collector, or baghouse, is required to be installed, maintained, and operated in a satisfactory manner. Satisfactory operation is said to require a pressure drop range between 2 and 10 inches of water column (w.c.), and the minimum pressure drop is prohibited from being less than 2 inches w.c., except when a large number of bags have been replaced or other reason acceptable to AQD.

During the inspection, there were no visible emissions (other than steam) from the baghouse exhaust stack. The instantaneous reading obtained from the control room computer monitors ranged from 2.8 to 3.1 inches, w.c.. The baghouse appeared to be operating properly, at this time. Additionally, see attached to this report for several examples of the baghouse inspection log. These show that black light testing was conducted on 3/16 and 7/5/2017, and on other dates, burner fine tuning was done. None of the fabric filter bags were replaced, on the dates records were provided for, as all were in good condition.

V. TESTING/SAMPLING

1. This condition states that verification of odor rates from this plant may be required, upon notification from the AQD District Supervisor. Neither this HMA plant nor its predecessor at this site have ever been the subject of an odor complaint to the AQD, and therefore testing for odor rates is not being required at this time.

2. EUHMAPLANT is required to undergo stack testing for CO emission rates within 60 days after achieving maximum production rate of HMA, but not later than 180 days after commencing trial operation. Stack testing for CO took place from 7/20 to 7/21/2016. The CO results, which averaged 0.13 lb/ton while firing RUO, complied with the permitted limit for CO while firing RUO of 0.201 lb/ton.

3. EUHMAPLANT is required to undergo stack testing for particulate emission rates within 60 days after achieving maximum production rate of HMA, but not later than 180 days after commencing trial operation, pursuant to 40 CFR Part 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities*. Stack testing for NSPS particulate rates took place from 7/20 to 7/21/2016. The particulate results were 0.006 grains/dscf, and 0.004 lb/ton, below the NSPS limit of 0.04 grains/dscf, and below the permitted limit of 0.03 lb/ton, respectively.

The company is required to notify the AQD District Supervisor in writing, within 15 days of the date of commencement of trial operations. On 5/23/2016, AQD received a 5/19/2016 letter from Mr. Benjamin J. Kroeger, Environmental Engineer for Edward C. Levy Co., advising AQD that construction of the HMA plant was completed on 5/3/2016. No later than 45 days prior to testing, a complete test plan, including a testing schedule, is required to be submitted to AQD. On 5/23/2016, AQD's Technical Programs Unit (TPU) received a 5/19 stack test protocol from Derenzo Environmental Services (DES), so this condition was met.

VI. MONITORING/RECORDKEEPING

1. All required calculations are required to be completed in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month. The company demonstrated compliance with this requirement, because on 9/25/2017, they supplied a production report for 2017, which had current data through the end of 9/24/2017.
2. Virgin aggregate feed rate and RAP feed rate is required to be monitored on a continuous basis. This was verified visually, during the inspection. Individual aggregate types and feed rates thereof are monitored and tracked.
3. The permittee is required to monitor, with a hand held CO monitor, CO emissions from EUHMAPLANT and associated production data from the time of the emissions readings upon startup of each paving season, upon a malfunction of the drum dryer or its associated burner, and once per calendar month in which EUHMAPLANT operates. I was informed by Mr. Guigar that they typically collect CO data twice per month.

The example of CO data which I reviewed was dated 8/10/2017, and read as follows:

CO reading #	Co reading, in ppm
1	336
2	320
3	311
4	330
5	396
6	396
7	398
8	396

TPH: 300
 Mix code: 1850

4. The permittee is required to monitor emissions and operating information in accordance with 40 CFR Part 60 Subparts A and I. The stack testing of 7/20-21/2016 was within 180 days of commencing operation.
5. The permittee is required to 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 at all times. They are required to maintain a log of all significant maintenance activities conducted and all significant repairs made to EUHAMPLANT. Maintenance for the baghouse or fabric filter dust collector is required to be consistent with the Preventative Maintenance Program specified in Appendix B of the PTI. Attached to this inspection activity report are several examples of the baghouse inspection log.

During the inspection, the components of EUHAMPLANT appeared to be operating properly. There were no fugitive visible emissions from the virgin aggregate conveyors, RAP conveyors or RAP collar, the drum dryer, the burner housing, the knockout box, baghouse, dust reinjection system, or drag slat

conveyor.

6. The permittee is required to keep the following records for each calendar month of operation:

- a. Identification, type and amounts (in gallons) of all fuel oils combined. This is being done, as demonstrated by the examples of facility recordkeeping attached to this report.
- b. Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (Btu/lb) of all fuel oils being combusted. Please see sample results table for the RUO samples collected today, near the end of this inspection activity report.
- c. Tons of HMA containing RAP produced, including the average % of RAP per ton of HMA produced containing RAP. This is being done, as demonstrated by the recordkeeping attached to this inspection activity report.
- d. Tons of HMA produced while burning each fuel type. This is being done, as demonstrated by the recordkeeping attached to this inspection activity report.
- e. Tons of total HMA produced. This is being done, as demonstrated by the recordkeeping attached to this inspection activity report.

7. The permittee is required to keep intermittent daily records of the following production information for EUHAMPLANT:

- a. The virgin aggregate feed rate. This data is kept on a daily basis and is shown in their yearly production spreadsheets.
- b. The RAP feed rate. This data is kept on a daily basis and is shown in their yearly production spreadsheets.
- c. The asphalt paving material product temperature. This data is kept on a daily basis and is shown in their yearly production spreadsheets.
- d. Information sufficient to identify all components of the asphalt paving material mixture. This data is kept on a daily basis and is shown in their yearly production spreadsheets.
- e. Tons of HMA produced while burning each fuel type. This data is kept in their fuel use reports.
- f. Tons of total HMA produced. This data is kept in their daily and yearly production reports.

The permittee is to record the initial mix design and time, upon startup. When a new mix design (i.e. a different mix design) is activated, the time and new mix design are to be recorded. It is my understanding that this data is kept.

8. This requires monthly and 12-month rolling time period emission calculation records of all criteria pollutants and TACs listed in the emission limit table at the start of the Special Conditions in the PTI for EUHAMPLANT. Please note that stack test results may be used to estimate emissions, with AQD approval. The 12-month emission calculation records were submitted in early 2017 for calendar year 2016, via MAERS.

MAERS data for operating year 2016:

Pollutant	Emissions in lbs	Emissions in tons	Permit limit in tons
CO	39,462.35	19.73	80
Lead	1.18	0.0006	NA, permit limits are in lbs/ton
NOx	10,708.01	5.35	NA, permit limits are in lb/ton; NOx PTE = 15.3 TPY, per engineer's notes.
PM10, filterable	11,394.62	5.70	NA, permit limits are in lb/ton; PM10 PTE = 5.8 TPY, per engineer's notes.
PM10, primary	1,251.07	0.63	NA, permit limits are in lb/ton; PM10 PTE = 5.8 TPY, per engineer's notes.
PM2.5, filterable	863.83	0.43	NA, permit limits are in lb/ton; PM2.5 PTE = 1.4 TPY, per engineer's notes.
SO2	1,542.10	0.77	NA, permit limits are in lb/ton; SO2 PTE = 16.5 TPY, per engineer's notes
VOC	14,287.35	7.14	NA, no VOC limit; VOC PTE = 15.3 TPY, per engineer's notes.

9. The permittee is to keep records of all CO emissions and related production data (at the time CO data was collected). It is my understanding that they are keeping production data from the time the CO emissions are monitored, such as 300 TPH of mix code 1850 being produced on 8/10/2017, while CO data was being collected.

10. The permittee is to record average daily, monthly, and 12-month rolling time period records of the amount of HMA product produced while burning each fuel type, and of the total amount of HMA product produced. The facility appears to be keeping daily, monthly, and yearly records on fuel use, based on the daily and monthly and yearly recordkeeping provided by Mr. Gohn. The daily and monthly recordkeeping is attached to this inspection activity report. The spreadsheets used for 2016 and 2017 yearly recordkeeping are too large to be printed, and are being kept electronically. The annual MAERS report also shows the amount of HMA product produced while burning each fuel type.

11. Monitoring is required of fuel usage rate for EUHMAPLANT, on a daily basis. It is my understanding that this data is kept on a daily basis.

VII. REPORTING

1. Within 30 days after installation, construction, reconstruction, relocation or modification, the permittee is to notify the AQD in writing, of completion of this activity. The company sent AQD a letter notifying us of the 5/3/2016 date of completion of construction.

VIII. STACK/VENT RESTRICTIONS

1. The exhaust gases from the baghouse exhaust stack are required to be exhausted unobstructed vertically upwards from a stack (SVHMAPLANT) with a maximum diameter of 68 inches, and a minimum height of 50 feet. The stack appears to comply with this requirement.

IX. OTHER REQUIREMENTS

NA.

Special Conditions applicable to EUYARD:

1. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The fugitive dust control plant in Appendix B of the PTI is required to be implemented and maintained. The facility appeared to be taking the necessary steps to control fugitive dust onsite, although I requested more attention to an unpaved area of the plant yard, as described earlier in this report.

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

1. All required calculations are to be completed by the 30th day of the calendar month, for the previous calendar month.

2. The permittee is required to calculate the annual fugitive dust emissions for EUYARD,, using emission factors from the U.S. Environmental Protection Agency (EPA) document AP-42, or other emission factors approved by the DEQ. The company submitted in early 2017 the 2016 fugitive dust emission calculation in their MAERS report . The emissions are shown in the table of 2016 fugitive dust emissions, under SC No. VII. 1, below.

VII. REPORTING

1. The permittee is required to report the actual emission levels from EUYARD to the AQD through the annual MAERS report. The company submitted the 2016 annual fugitive dust emissions, via their MAERS report. Please see table below.

2016 fugitive dust emissions:

Process	Lbs	Tons
Haul roads – paved & unpaved	4,638.84	2.32
Aggregate storage	6,755.78	3.38

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Special Conditions applicable to EUACTANKS**I. EMISSION LIMITS**

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

The permittee is required to install, maintain, and operate in a satisfactory manner a vapor condensation and recovery system. The three new liquid AC tanks and the two existing liquid AC tanks which remain from the previous plant at this site are all equipped with condensers. No visible emissions could be seen from the tanks, or their condensers.

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Special Conditions applicable to EUSILOS**I. EMISSION LIMITS**

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee is required to have an emission control system from the top of each storage silo which

is installed, maintained, and operated in a satisfactory manner. Emissions from the top of each silo, it was explained, are drawn downwards, through the enclosed drag slat conveyor, and ducted to the burning zone of the drum dryer for combustion. When the drum dryer is not running, silo emissions pass through the dryer,, and exit the plant after traveling through the main baghouse and the 50 foot exhaust stack. No visible emissions could be seen from the top of the storage silos, or from the drag slat conveyor.

2. The permittee is required to have the load out activities take place in an area which is enclosed except for entrance and exit points, with emissions vented into the burning zone of the drum dryer or controlled by equivalent means. The company chose as an equivalent means a blue smoke control system. They are required to install, maintain, and operate the system in a satisfactory manner.

There are four storage silos for HMA product, and two loadout lanes which pass underneath them. The loadout lanes are not totally enclosed. Rather, the sides of the lanes are somewhat open, with wall panels which extend down from the ceiling of the loadout area, stopping at about the roofline of a typical truck. It is my understanding that the purpose of this design is to allow for a truck driver to safely exit their vehicle and the loadout lane itself, in the event of an accident.

An air handling system has been installed for the loadout lanes under the silos, with the intent to capture emissions of blue smoke from the loadout process. The captured emissions are then routed to a baghouse for control. It is my understanding that the baghouse contains dry plastic pellets, which are moved in a swirling motion, followed by a series of fabric bags. The controlled emissions are then exhausted unobstructed vertically upwards, through a single exhaust stack.

I observed the loadout process, standing to the east of the silos and loadout lanes. My impression was that generally 90% of the steam and/or blue smoke from loadout emissions were being captured by the air handling system, and that when shorter trucks were loaded, 100% of the emissions were being captured. Winds were variable, and appeared to shift from coming out of the north north west to coming out of the north northeast. When I stood to the west of the silos and loadout lanes, and winds were out of the north northeast, I would estimate that 75-80% of emissions were contained. The previous Ace-Saginaw plant at this site had no loadout control, and so the current system is a definite improvement.

When truck loadout emissions were being routed to the loadout baghouse, I saw no emissions from the baghouse exhaust stack. I was informed that they asked for guidance from the manufacturer during 2016, because they were not seeing the performance they had wanted to, with the blue smoke control system. I was told that they had never received a maintenance guide for the system, and the fabric bags had been "blinded" when the wrong kind of filter cake starting material had been utilized. I was told that subsequently the manufacturer sent them a maintenance guide and new bags, and now they have seen improved performance from the system.

When I

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

RUO Sample collection:

Ted of Ace-Saginaw Paving collected RUO samples, while I observed. A total of 4 samples were collected, but each sample consisted of two 4 ounce bottles. I originally planned to label the sample bottles RUO 1a, RUO 1b, RUO 2a, RUO 2b, etc., but guidance over the phone earlier this week from Ms. Megan Chilcote, Project manager for Merit Laboratories, Inc. was to avoid using the "a" and the "b" suffixes.

RUO samples RUO 1, RUO 2, and RUO 3 were immediately placed in ice, in a cooler, per the attached photo 001. RUO 4 was left onsite, for the company to keep in case AQD's samples have any exceedances, so that Ace-Saginaw can have their sample analyzed. I drove the AQD samples immediately to Merit Laboratories, Inc. in East Lansing. The samples were received by Ms. Chilcote, . A copy of the lab request form and the e-mail with the sample receipt are located in the AQD Lansing District orange (report) file for this facility.

RUO sample results:

On 9/18/2017, analytical results for the 3 RUO samples were received from Merit Laboratories, Inc., and are attached, for reference. I forwarded the sample results to Mr. Gohn by e-mail, the next morning. A summary of the results is below:

Results for RUO parameters which are limited by PTI No. 128-73F

Results:	RUO 1	RUO 2	RUO 3	Detection limit	Permit limits	Limits met?
PCBs	ND	ND	ND	<10,000 ppb	1.0 ppmw (maximum)	Yes
Arsenic	ND	ND	ND	<0.20 ppm	5.0 ppmw (maximum)	Yes
Cadmium	ND	ND	ND	<0.20 ppm	2.0 ppmw(maximum)	Yes
Chromium	ND	ND	ND	<0.50 ppm	10.0 ppmw (maximum)	Yes
Lead	ND	0.20 ppm	0.92	<0.20 ppm	100.0 ppmw (maximum)	Yes
Btu	18,400 Btu/lb	18,200 Btu/lb	17,900 Btu/lb	<1,000 Btu/lb	17,000 Btu/lb (minimum)	Yes
Total halogens	256 ppm	245 ppm	255 ppm	<200 ppm	4,000 ppmw (maximum)	Yes
Flashpoint	ND	ND	ND	>180 degrees F	100 degrees F (minimum)	Yes

Note: Ash is limited by the PTI, but was not analyzed because the lab is unable to run an ash analysis on an oil matrix.

Results for parameters which are not limited by PTI No. 128-73F

Parameters	Results RUO 1	Results RUO 2	Results RUO 3	Detection limit
Manganese	ND	ND	1.28	<0.50 ppm
Mercury	ND	ND	ND	<0.050 ppm
Molybdenum	11.0 ppm	11.3 ppm	42.3	<0.50 ppm
Nickel	ND	ND	ND	<0.50 ppm
Pesticides	ND	ND	ND	<1,000 ppb; for toxaphene, <10,000 ppb

Miscellaneous:

They do not have a boiler onsite, but rather a small, on demand hot water heater, so a copy of the DEQ boiler NESHAP card was not provided, in this instance. The heater is much smaller than 120 gallons in capacity, and does not appear to be subject to the boiler NESHAP for area sources, 40 CFR Part 63, Subpart JJJJJJ.

Conclusion:

No instances of noncompliance were observed.

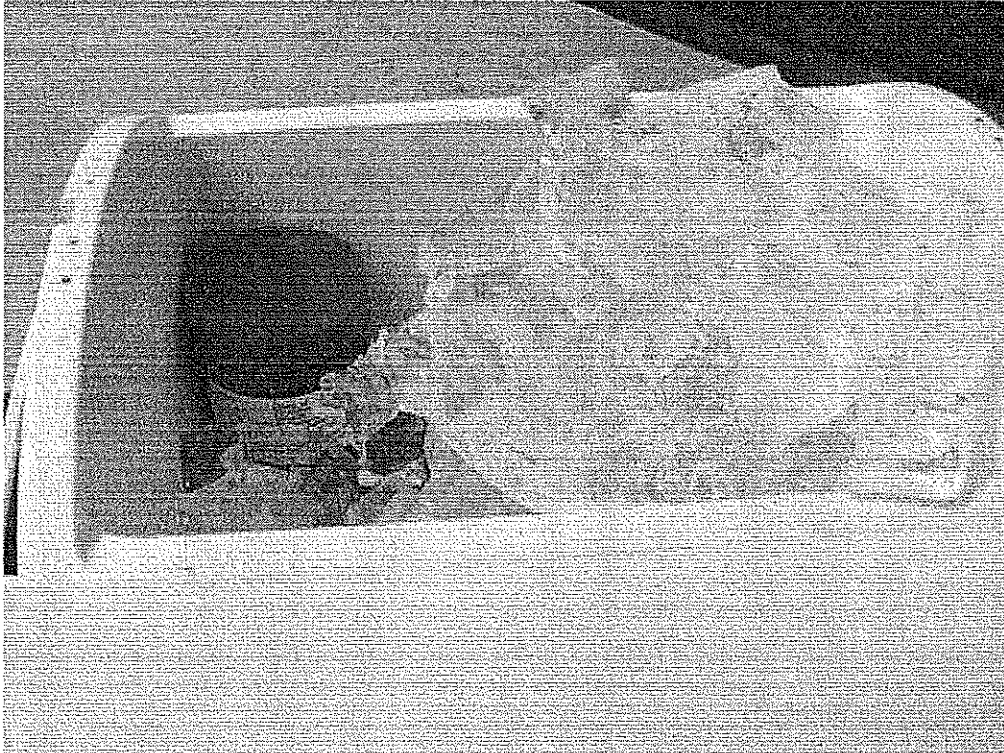


Image 1(001) : RUO samples in cooler, with ice.

NAME [Signature]

DATE 9/27/2017

SUPERVISOR [Signature]