

remove any surface moisture and to heat the aggregate to a temperature between 250° F and 350° F. The kiln rotates as the aggregate travels through it. To ensure maximum drying and heating, the kiln is equipped with longitudinal troughs called flights, which lift and tumble the aggregate increasing its exposure to hot gases. The facility operates a counter flow drum.

The dryer, heated with natural gas is equipped with a cyclone and a baghouse for dust emission control. The facility is permitted to also use recycled used oil (RUO) for fuel.

However, due to the high cost for RUO, this fuel type is not being used. From the discharge end of the dryer, the heated aggregate is transported by an elevator to a counter flow drum, where liquid asphalt cement and RAP are added to the mix. The finished product is then sent via a conveyor/elevator to the top of the silos, where it is loaded into one of two 180-ton silos for storage and dispensing.

Liquid asphalt is stored in heated tanks. At the time of inspection, there were four tanks with various capacities for storing liquid asphalt.

An 8,000 gallon diesel tank is on-site. The diesel fuel is used to power the loaders and other mobile equipment at the facility. Another 8,000 gallon diesel tank is located at the site and is used to store the tacky material that is applied to the roadway before the asphalt is applied.

PROCESS CONTROLS

Particulate emissions from the drums are controlled by a baghouse. All of the bags in the baghouse were replaced a few months ago. Spare bags and spare cages are stored onsite, should a bag malfunction. The baghouse is inspected monthly. The bags are inspected at the beginning of the season with a black light, and again about every two or three months. Most of the dust collected by the baghouse is recycled back into the process. There are no load-out controls.

Fugitive dust emissions from the lot are controlled by applications of calcium chloride, and a street sweeper is used on Huron River Drive if necessary. A record of each calcium chloride application is maintained and was reviewed during the onsite inspection.

INSPECTION NARRATIVE

I arrived at the facility at 10:00 am on August 16, 2016. The facility was not operating at the time of the inspection because there was a large volume of rainfall during the previous night. No off-site odors or track-out were noted. I met with Mr. Rocky Frazier, Plant Supervisor, who explained the process and the activities in the control room, and Ms. Sue Hanf, Environmental Engineer. The production and maintenance records were reviewed during the onsite inspection, and were emailed to me during the inspection.

The plant is currently operating solely on natural gas, though they are allowed to operate on recycled used oil (RUO). Mr. Frazier said that they had burning RUO about two times since the permit was modified to allow the burning of RUO. Shortly after the permit was modified, the cost of RUO increased so the plant continued to operate with natural gas. Mr. Frazier said that currently, there is no RUO available for purchase because many generators' are reusing their own oil.

During our discussion of the plant operations, it was shared with me that the facility plans to replace the plant with a larger and more up to date plant. The facility is currently in the planning stages, but hopes to have a permit application to DEQ as soon as the design plans are finished.

We did not walk through the facility during the onsite inspection because the plant was not operating. From the control room, I could observe the process equipment, which has not been changed since the last inspection in 2012.

APPLICABLE RULES/PERMIT CONDITIONS

Barrett Paving was issued Permit to Install No. 98-96C on July 31, 2006, superseding the conditions of Permit to Install No. 98-96B. The permit places restrictions on emissions, allowing the facility to opt-out of Title V requirements and allows the facility to use RUO as fuel.

Permit to Install No. 98-96C; Special Conditions:

EUHMAPLANT:

Emission Limits:

- 1.1a-s: Compliance. Based on the MAERS for 2015 and the collected records during the onsite inspection, all emissions are at acceptable levels. The emissions are much lower than the permitted limits.

Material Usage Limits

- 1.2: Compliance. Mr. Frazier stated that no RUO has been burned in the past year because RUO is not usually available for purchase. When RUO is available for purchase, the cost is usually so high that it is not economical for purchase.
- 1.3: Compliance. Mr. Frazier and Ms. Hanf stated that the facility is burning only natural gas at this time.
- 1.4: Compliance. The facility is currently only burning natural gas.
- 1.5: Compliance. No asbestos is used at this facility.
- 1.6: Compliance. The RAP was at an acceptable level. Based on a review of the records, the facility has produced mixes with a monthly RAP average between 41.14% and 49.34%, which is less than the permitted limit of 50% RAP.
- 1.7: Compliance. The 12-month rolling production average through July 2016 was highest at 197,623 tons during the month of July 2016.
- 1.8: Compliance. Based on a review of the records for the paving season of 2016, the facility processed between 150 tons of HMA per hour to 220 tons per hour. There was one day, May 19, 2016, where this limit was exceeded. On this day the facility produced 604 ton HMA in 2.1 hours, with an hourly average of 288 ton per hour, which exceeds the 250 tons per hour permit limit. The average for the entire season through the date of the inspection was 198 tons per hour.

Process / Operational Limits

- 1.9: Compliance. Maintenance records for the baghouse were collected and reviewed. The bags are being properly maintained based on the maintenance records.
- 1.10: Compliance. The CO emissions are checked two to three times per year and are at a consistent range with previous years.
- 1.11: Compliance. MAP is approved and is on file.
- 1.12: Compliance. Pressure readings are recorded in the maintenance log kept onsite. Based on a review of the records, the baghouse pressures are in a range between 3.5 and 4 inches of water column.

Testing

- 1.13: NA: At this time, there is no reason to have the facility perform odor testing since no complaints have been received in the past year, and the odor complaint that was

received in December 2011 was not verified.

1.14: Compliance. Stack testing for Hydrogen Chloridewas performed on September 25, 2008.

1.15: Compliance. Stack testing for SO₂was performed on September 25, 2008.

Monitoring

1.16: Compliance. Mr. Frazier has monitoring equipment in the control room which tracks the amount of aggregate feed and RAP into the HMA. This information is recorded in the daily production log.

1.17: Compliance. The plant is tested for CO emissions about 3 times per year, which based on the operating schedule is consistent with start up and every 500 hours of operations.

Recordkeeping / Reporting / Notification

1.18: Compliance. All calculations were available were available during the onsite inspection. During the onsite inspection, the records were complete through the day before the scheduled inspection.

1.19: Compliance. Emissions records and operating information were kept in a spreadsheet that was accessible in the office at the facility. These records were reviewed during the onsite inspection. Copies of these records are attached to this report.

1.20: Compliance. Maintenance is performed as necessary, and maintenance records are kept as required. Maintenance records are kept in a spreadsheet that is accessible in the office at the facility. A copy of these records is attached to this report.

1.21: Compliance. Records for fuel type, usage and tons of HMA produced are maintained, and are stored onsite in a spreadsheet. These records were reviewed during the onsite inspection, and were acceptable. Natural gas is the only fuel used during the past year. A copy of these records is attached to this report.

1.22: Compliance. Production records, including aggregate and RAP feed rate, product temperature, and asphalt formulations, are maintained as required in a spreadsheet accessible in the office of the facility. A copy of these records is attached to this report.

1.23: Compliance. Monthly and 12-month rolling emission calculations are maintained as required. These records are attached to this report.

1.24: Compliance – CO emissions records maintained. A copy of this record is attached to this report.

1.25: Compliance. Average hourly, monthly, and 12-month rolling HMA production records are maintained as required. A copy of this record is attached to this report.

Stack/Vent Restrictions

1.26: Compliance. Stack dimensions (64 feet high maximum with minimum 60 inch diameter) appear to be correct. No changes to the stack have been performed since the last inspection.

Process / Operational Limits

2.1: Compliance. Fugitive dust plan is implemented and maintained as required. Roadways were properly controlled during the onsite inspection. During the inspection, the roadways were wet as a result of the recent rain fall.

EUYARD:

Recordkeeping / Reporting / Notification

2.2: Compliance. Fugitive dust emissions are calculated and reported in MAERS. 0.23 tons of fugitive emissions from the yard, roadways, and aggregate piles were reported in 2015 MAERS.

FGSILOS:

Process / Operational Limits

3.1: Compliance. The emission capture system for the top of the silos was operating properly during the onsite inspection.

Emission Limits:

4.1a: Compliance. Emissions of each individual HAP is under the emission limit. Based on the records, the facility has emitted less than one ton of an individual HAP per 12-month rolling average time period.

4.1b: Compliance. Emissions of aggregate HAPs is under the emission limits. Based on the records, the facility has emitted less than one ton of aggregated HAPs per 12-month rolling average time period.

Recordkeeping / Reporting / Notification

4.2: Compliance. All calculations were reviewed during the onsite inspection, and were acceptable. A copy of these records is attached to this report.

4.3: Compliance. All calculations for HAPs emissions were reviewed during the onsite inspection, and were acceptable.

Appendix A: Fugitive Dust Plan

1.a: Compliance. Chloride was applied to the site about twice per month. Records are maintained onsite.

1.b: Compliance. Speed limit signs were present on site. No speeding vehicles were observed during the onsite inspection.

1.c: Compliance. Stock piles were maintained to minimize the drop distance.

1.d: Compliance. Piles were maintained to minimize dust. Records are maintained for each dust treatment. During the inspection, the piles were wet.

2.a: Compliance. The roadways are treated as needed. During the onsite inspection, the roadways were wet.

2.b: Compliance. During the onsite inspection, the unpaved surfaces were wet. I did not observe dust clouds when vehicles drove on these areas.

2.c: Compliance. No piles of spilled aggregated were observed during the onsite inspection.

3: Undetermined. During onsite inspection, no trucks were observed entering or exiting the site.

4: Undetermined. No equipment was observed operating during the onsite inspection.

5: Compliance. Records of dust control methods are kept in the maintenance log at the facility and were reviewed during the onsite inspection.

6: Undetermined. The plant was not operating during the onsite inspection.

Appendix B: Preventative Maintenance Program for the Fabric Filter Dust Collector

1: Compliance. The pressure drop across the baghouse is monitored and recorded. This record is attached to this report.

2: Compliance. A temperature sensor alarm is present on the baghouse.

3: Compliance. Particulate matter collected from the baghouse is collected and stored in a proper manner.

4: Compliance. All seals and piping appeared to be operating in good condition.

- 5: Undetermined. The plant was not operating during the onsite inspection.
- 6: Compliance. A black light inspection was performed at the beginning of the season.
- 7: Compliance. Spare bag are stored onsite. A record of when the bags are changed and when spare bags are reordered is attached to this report.
- 8: Compliance. A records log is kept onsite in a spreadsheet. A copy of this log is attached to this report.

Appendix C: Compliance Monitoring Plan (CMP) for Facilities Burning Recycled Used Oil

NA: The facility is currently permitted to burn RUO, though no RUO has been burned in at least the past year. The facility wishes to maintain the option to burn RUO in the future should the price of burning RUO be a better economical option than natural gas. However, during the onsite inspection, no RUO was present at the facility and it was not being burned.

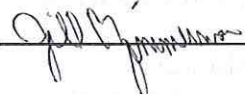
The facility is subject to New Source Performance Standards (NSPS) Subpart I. The compliance conditions of this rule are incorporated into permit 98-96C.

MAERS REPORT REVIEW

This report was received on February 23, 2016. The reported emissions were supported by a calculation document that was submitted with the report. All emissions appear to have been reported accurately.

FINAL COMPLIANCE DETERMINATION

At this time, Cadillac Asphalt appears to be operating in compliance with Permit to Install No. 98-96C as well as all applicable State and Federal Regulations.

NAME  DATE 9/1/16 SUPERVISOR JK