

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

B164658044

FACILITY: RIETH RILEY CONSTRUCTION CO., INC.		SRN / ID: B1646
LOCATION: 4150 S. CREYTS RD., LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: EATON
CONTACT: John Berscheit , Technical Services Manager		ACTIVITY DATE: 05/13/2021
STAFF: Michelle Luplow	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Partial compliance evaluation inspection conducted as part of a full compliance evaluation.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Dan Larson (dlarson@rieth-riley.com), Manager

John Berscheit (jberscheit@rieth-riley.com), Technical Services Manager

Purpose

Conduct an announced, scheduled, onsite partial compliance evaluation (PCE) inspection to determine compliance with Rieth-Riley's Opt-Out Permit No. 97-03A. This inspection was conducted as part of a full compliance evaluation (FCE). This facility was last inspected August 2017.

Facility Background/Regulatory Overview

Rieth-Riley is a hot mix asphalt facility that uses both recycled asphalt (RAP) and virgin aggregate. D. Larson said that the majority of Rieth-Riley's production is for MDOT and county-level projects (including Livingston, Ionia, Eaton, Ingham, Shiawassee and Jackson Counties). They also specialize in parabolic curve paving for proving grounds.

Rieth-Riley generally fires up the plant around April 15th and operates the plant through November 15th. D. Larson said the length of the operating season depends on work load/projects and the weather. If it is too cold, operating the plant becomes costlier. This year the facility started up on April 22, 2021. D. Larson said they have 12-hr days for operation, where employees will start working around 3 – 4 a.m. and work until 8 – 9 p.m; HMA production typically occurs between the hours of 6 a.m. – 5 p.m. although, there are times when Rieth-Riley will operate through the entire night, depending on the projects.

A portable Rieth-Riley crushing plant will come to the site once per year to crush RAP from milled old roads, which is reincorporated into new asphalt. During the April 23, 2021 pre-inspection phone call, J. Berscheit said that the portable crushing plant (N6413) was currently at Rieth-Riley. The Lansing District Office had not received that relocation notice and I informed J. Berscheit of this. J. Berscheit sent me the relocation notice, which had been sent to the Cadillac District Office only. Upon review of MACES, Cadillac staff had entered the relocation notice, ensuring N6413's compliance with their General Permit for Nonmetallic Mineral Crushing relocation requirements. I had a call with Brad Shearer (plant manager for the Rieth-Riley portable crushing plant) and provided him with information regarding relocation notices and the appropriate district offices to send these notices to, in order to prevent confusion in the future.

During the previous inspection, T. Harris said Rieth-Riley has not used crumb rubber in approximately 2 years. During this inspection D. Larson and J. Berscheit both stated they were not aware that this facility was using crumb rubber since the last inspection.

With regard to the plant’s production of odors, during the previous inspection, T. Harris said that none of the mixes they produce are any more or less odorous. He said that the Antistrip PG 64-28 (an ingredient added to Ascro) has a different odor than the rest of the liquid asphalt, but this does not mean it is more odorous than the other liquid asphalt mixtures they use. He said Antistrip PG 64-28 is rarely used. The most produced mixes Rieth-Riley produces are Ascro; blends of 13A, the most common mix (driveways, parking lots); 36A (second most common mix); 3E10,4E10, LVSP (low volume super pave, similar to 13A, for interstate shoulders), 5E10, 4E1, 5E1 and 3E3,4E3 and 5E3. I confirmed with D. Larson that these are still the only mixes they make.

Rieth-Riley is an opt-out facility for HAPs.

Inspection

A pre-inspection Teams meeting was held on April 23, 2021 to ask questions and reduce the amount of time spent onsite for COVID-19 safety reasons. At approximately 9:00 a.m. on May 13, 2021, I arrived at Rieth-Riley and met with Dan Larson, Manager, and John Berscheit. From Canal, to St. Joe Highway to Creyts, and upon entering the facility I did not detect any asphaltic odors. Within the facility I could detect intermittent level 2 odors in Rieth-Riely’s parking lot (east of the HMA plant). I did not detect any odors to the west of the HMA plant. Winds were out of the WNW at 3 mph during the inspection. EU001 was operating during the onsite inspection.

In December 2018 Rieth-Riley replaced their permitted baghouse with a new baghouse. At that time AQD reviewed the information provided by Rieth-Riley and determined that, based on said provided information, the replacement baghouse appeared to have met the exemption Rule 285(2)(d) for replacement of control equipment with an equivalent or more efficient pollution control device.

During the onsite inspection I learned that Rieth-Riley had installed a vertical liquid asphalt storage tank to accompany the two permitted horizontal liquid asphalt storage tanks. Additionally, I learned that the three permitted 200-ton silos and the one permitted 150-ton storage silos that were installed in 2003 were replaced with four 300-ton storage silos during the winter of 2020. Replacement of the 4 storage silos also resulted in replacement of the asphalt loading tunnel, in addition to the “blue smoke package” control device ventilation system that was ducted from the storage silos to the stainless steel wool scrubber system. The current control system is what J. Berscheit described as “paper filters” that are used to collect condensable vapors from the post-drum, the silos, and the loadout from the silos. I requested a Rule 278a demonstration be submitted by 6/14/21 to demonstrate that installation of the vertical asphalt cement storage tank, the 4 new silos, and the control device for the silos, are exempt from the need to obtain a permit to install.

Table 1 provides a list of equipment located onsite.

Table 1. Equipment

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EU	EU Description
EU001	<p>Hot mix asphalt facility, aggregate conveyors, 400 ton/hr counterflow triple drum mixer with fabric filter dust collector. Operations are usually less than the 400 ton/hr threshold.</p> <p>Currently only operates burning natural gas</p> <p>Equipped with “paper filters” control device where exhaust from asphalt loadout and the silos is captured and sent through these filters</p> <p>Equipped with baghouse to capture particulate from the HMA mixing process prior to exhausting to ambient air</p>
EUACTANKS	<p>Two horizontal liquid asphalt storage tanks; each tank has 2 compartments, and 1 vertical liquid asphalt tank</p> <p>All tanks are heated via heat transfer oil which is continuously cycled and recycled through the unit.</p> <p>The heat transfer oil, which is used to keep the liquid asphalt warm, is heated by combustion of a natural gas-fired boiler. D. Larson explained that liquid asphalt cannot be kept at ambient temperatures, as it would become a solid. He said that liquid asphalt is used during all production days. They will leave the liquid asphalt in the tanks over the winter if there is any remaining product left after the paving season. The temperature depends on the product kept in these tanks, but generally is kept at the high 200°F to low 300°F range.</p> <p>Tanks are refilled multiple times per day during high-production.</p>
EUSILOS	<p>Four 300-ton finished-product storage silos all installed in 2020. Coils in the bottom of each silo are heated with heat transfer oil to keep the finished product at a working temperature.</p>
EUYARD	<p>Fugitive dust sources:</p> <ul style="list-style-type: none"> -all plant roadways -plant yard -material storage piles -material handling operations
Boiler	<p>2 MMBtu/hr Natural gas-fired for heating heat transfer oil exempt under Rule 282(2)(b)(i)</p>

EU001

Emission Limits & Testing

Emission rates for PM, SO₂, NO_x, and VOC are required to be tested upon request by the Department. The emission limits presented in the Emission Limits table of the PTI are to be used to calculate emissions if stack test data is not available.

Verification of the CO, HAPs and TACs emission rates was conducted during a 2004 stack test, using recycled used oil as the fuel oil at a rate of 300 tons/hour. See table below for the pollutant, emission limit, and stack test results. SO₂, NO_x, VOC, and PM emission rates were not determined during this test. These rates currently do not apply to Rieth-Riley's current operations as they are only burning natural gas as the fuel source in the drum at this time.

Table 2: 2004 Stack Test Results

Pollutant/TAC	Stack Test Result (lb/ton HMA material produced)	Emission Limit (lb/ton HMA material produced)	Verified/Compliant?
Lead	4.84E-7	1.5E-5	Yes
Manganese	3.52E-6	5.0E-5	Yes
Nickel	1.02E-6	1E-4	Yes
Benzene	4.0E-5	1.2E-3	Yes
Ethyl benzene	1.3E-4	0.0012	Yes
Toluene	1.4E-4	0.006	Yes
Xylene	Non-detect	0.0012	Yes
Acrolein	5.0E-5	1.0E-3	Yes
Formaldehyde	4.4E-4	0.01	Yes
Naphthalene	1.8E-5	1.0E-3	Yes
Sulfuric Acid	1.7E-4	6.2E-3	Yes
Hydrochloric Acid	Non-detect	0.006	Yes
Carbon Monoxide	0.095	0.20	Yes

Arsenic	1.10E-7	1E-6	Yes
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Emission Limits & Recordkeeping

Calendar year emissions of CO, SO₂, NO_x, VOC and PM are required to be calculated, using stack test data as the emission factor, or the Emission Limits in PTI 97-03A if stack test data is not available. J. Berscheit provided me with these emissions for 2020 and 2021 calendar years through May 2021: SO₂, NO_x, CO, and PM emissions are tabulated on “Rolling Monthly Report” and VOC emissions can be found on a monthly basis on the “Monthly Report.” Table 3 contains the 2020 and 2021 calendar year emissions.

Table 3. Criteria Pollutant Calendar Year Emissions

Pollutant	2020 Calendar Year (tons)	2021 Calendar Year through May (tons)	Emission Limit (Calendar year tpy)	Compliant
CO	32.7	2.12	89.9	Yes
SO ₂	10.5	0.6	NA	NA
NO _x	18.8	1.27	NA	NA
VOC	9.0	0.61	NA	NA
PM	6.3	0.42	NA	NA

Material Usage Limits & Recordkeeping

Rieth-Riley is limited to a maximum of 50% recycled asphalt (RAP) material based on a monthly average and is required to record the average percent RAP per ton of HMA on a daily basis. As requested, J. Berscheit provided me with records of the average monthly percent recycled asphalt material (RAP) used along with total HMA produced containing RAP for the highest production month in 2020 (August) as well as for April and May 2021. Rieth-Riley keeps track of the total Hot Mix Asphalt (HMA) produced that contains RAP and the Total RAP aggregate used on a daily and monthly basis. The average % RAP for August 2020 was 30.9, while April and May 2021 monthly averages were 42.8% and 35.2%, respectively.

Process/Operational Limits & Recordkeeping

Production at this facility is limited to 850,000 tons of HMA per 12-month rolling period. I requested 12-month rolling records from April 2020 – April 2021. Records demonstrate that Rieth-Riley had stayed within this limit.

The 12-month rolling period with the highest amount of HMA produced was September 2019 – August 2020, at 334,279 tons.

In addition to the 12-month rolling limit on HMA produced, there is also a 400 ton/hr HMA limit, based on a daily average. For the purposes of this permit, compliance of this condition is checked by dividing the daily production of HMA by the operating hours for the day to determine if Rieth-Riley is in compliance with the hourly limit. As requested, J. Berscheit provided me with daily hours of operation and daily production for August 2020, April 2021 and May 2021 as snapshots used to determine compliance with the hourly limit. The highest hourly HMA production rate was 8/10/20 at 340 tons per hour, within the 400 ton/hr limit.

Rieth-Riley shall not burn any hazardous waste, blended fuel oil or specification recycled used oil (RUO) containing any contaminant in PTI 97-03A condition 1.6 at greater than the specified ppm by weight, and Rieth-Riley must also have records of the % sulfur, specific gravity, flash point, higher heating value of all fuel oils combusted on a monthly basis. J. Berscheit and D. Larson said Rieth-Riley only burns natural gas; therefore this requirement, as well as the Compliance Monitoring Plan for RUO in Appendix B of the PTI, does not apply to Rieth-Riley operations at this time.

Equipment

The Preventative Maintenance Program for the fabric filter dust collector (Appendix A in the permit) is required to be implemented and maintained if Rieth-Riley wishes to operate EU001.

The following is a compliance evaluation of the Preventative Maintenance Program for the fabric filter control system:

BAGHOUSE OPERATING PRESSURE DROP

The fabric filter dust collector pressure drop is required to be recorded once per day, but continuously monitored. The acceptable pressure drop range should be no less than 2 in H₂O and no greater than 8 in H₂O. During the inspection, I had asked that Rieth-Riley staff enter the control tower and obtain the pressure drop though photos and then send the photos to me. J. Berscheit had taken a photo of a pressure drop monitor that had a scale based on tenths of an inch. I expressed my concern that this was not the same monitor I had viewed during the previous inspection. Later that day, after the inspection, J. Berscheit confirmed with the facility's maintenance specialist that the pressure drop photographed during the inspection was for the burner, and he provided me with a new photo of the correct pressure drop monitor, reading at ~3.5 "H₂O. Rieth-Riley showed me via photographs that these two monitors have since been labeled "burner" and "baghouse" to prevent confusion in the future.

J. Berscheit, per my request, provided me with April & May 2019, and April & May 2021 pressure drop records. Pressure drops ranged from 3 "H₂O to 7 "H₂O. Early season pressure drop records were requested to learn/understand what pressure drops look like early on in the season, prior to larger production periods. All appeared to be in compliance with the 2-8 "H₂O permitted range.

BAGHOUSE/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 violated, which should begin

immediate sequential shut-down if the situation is not resolved in a short time period. J. Berscheit said that the high temperature set-point is 400°F, at which point the flame on the drum mixer is shut off. J. Berscheit also confirmed that the baghouse bags are rated at 450°F.

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. J. Berscheit confirmed that the fines are collected and then dropped into a conveyor that is fed back into the system. They do not dispose of any particulate.

PIPING AND SEALS MAINTENANCE

Piping and seals on the baghouse are required to be replaced as needed. The old (pre-2018) baghouse had bags that needed to be silicone-sealed to the piping. During this inspection, J. Berscheit said the new baghouse equipment allows the bags to be clamped to the piping and therefore sealing is unnecessary.

VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN

In the event that visible emissions, which appear to exceed the 20% 6-minute opacity limit per Method 9, are observed at the discharge point of the stack, certified visible emissions readings are required to be taken to verify whether the limit has truly been exceeded. If no certified visible emissions reader can be present onsite within 60 minutes of observing the emissions, operations are required to cease immediately and the cause of the visible emissions are required to be determined prior to plant operation.

During the inspection I observed the emissions from the stack and did not see any visible emissions being emitted, only steam.

BLACK LIGHT INSPECTIONS

A black light test is required to be conducted at least once per year before operations for the paving season begin, and records of the black light inspections, including date, time and findings are required to be recorded. 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. I requested the 2021 operating season black light test inspection. The 2021 black light test was conducted on 4/15/21, the notes do not provide the time the test was conducted, nor the findings of the black light test. I have made Rieth-Riley staff aware of this deficiency in order to ensure appropriate and improved recordkeeping occurs for future black light testing (time and findings of the black light test). Failure to improve these records for future inspection may result in a violation notice being issued.

INVENTORY OF FILTER BAGS

A minimum of 15 fabric filter bags are required to be maintained in inventory onsite at all times. J. Berscheit, D. Larson and I confirmed onsite that there were at least 4 boxes (25 bags per box) of filter bags in inventory onsite.

BAGHOUSE INSPECTION RECORD

A written record of the following is required to be kept:

- Visual inspections of the interior components of the baghouse, including date, time and findings
- Number of filter bags installed as a result of each inspection to replace filter bags already in use in the baghouse, including date, time location, and whether the replacement filter bag was brand new or cleaned, previously used filter bag
- An explanation (i.e., a description of the damage found) for each filter bag removed from the baghouse 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 emissions, including date and time of visible emission occurrence and results of EPA Method 9 observation if any. A visible emission record sheet will be made available
- All significant maintenance activities performed on the baghouse

Rieth-Riley keeps record of their baghouse maintenance on their “Inspection Sign Off Sheet.” This record includes the day of the inspection and comments associated with the inspection; the notes do not provide the time and findings of the visual inspections of the interior components of the baghouse. I have made Rieth-Riley staff aware of this deficiency in order to ensure appropriate and improved recordkeeping occurs for future baghouse inspections. Failure to improve these records may result in a violation notice being issued.

Monitoring & Recordkeeping

Rieth-Riley is required to continuously monitor the virgin aggregate feed rate and RAP feed rate to EU001 and keep intermittent records for these rates. Instantaneous readings can be directly taken from their computer program which continuously monitors the virgin aggregate and RAP feed rates. During the 2017 inspection, it was learned that Rieth-Riley had installed an entirely new monitoring system, which included new digital continuous monitors for the mix temperature, stack temperature (baghouse), the mix design for the current mix being produced, aggregate rates in tons per hour, the production total, and the RAP feed rate in tons per hour.

During this inspection, I asked that Rieth-Riley staff enter the control room without my presence, for COVID-19 safety concerns, and take a photo of the displays that provide these instantaneous readouts and email them to me. I reviewed the photo with Rieth-Riley staff to identify the following are continuously monitored: instantaneous virgin aggregate feed rate and RAP feed rates (153 tph and 108 tph during the inspection); the asphalt mix being produced during the inspection (13A – “500 mix”); the asphalt paving material product temperature (297°F); and the asphalt production rate (277 tph). I requested intermittent records for May 3 and May 7, 2021. Records indicate that there was no production on May 3rd. May 7th data includes the virgin aggregate feed rate and RAP feed rate, and the product temperature.

CO monitoring is required to be conducted via hand-held CO monitor upon start-up of each paving season, upon a malfunction of the drum dryer/mixer or its associated burner, and after every 500 hours of operation. For each CO monitoring occurrence, the production data associated with the time the emissions data were collected should be recorded, and each data set shall contain at least 8 separate CO readings over a period of 30+ minutes. As of the date of inspection, Rieth-Riley had not yet operated 500 hours. J. Berscheit provided me with 2020 and 2021 CO monitoring records. In 2020, CO monitoring was conducted on May 6th, August 11th, and October 14th. Operating season 2021 CO readings were conducted on April 27th.

Each of the CO readings were conducted over 30+ minutes and asphalt production tons per hour were correlated with each set of CO readings. Newer asphalt plant permits will allow an average maximum of 500 ppm CO; the CO reading records indicate that the average CO concentrations were under 500 ppm, an indicator that the burner has been tuned properly.

Rieth-Riley is required to install, maintain and operate a device to monitor the pressure drop across the baghouse, and must be calibrated on an annual basis in accordance with manufacturer's instructions. J. Berscheit said that the gauge is always replaced on an annual basis because the cost to do conduct a calibration exceeds the cost to operate a factory-calibrated gauge. He said that the gauge was replaced in the spring of 2021.

Fuel usage rate is required to be monitored and recorded on a daily basis in gallons or cubic feet per day. The natural gas meter onsite is a continuous monitor that Rieth-Riley staff said they read on a daily basis, the data from which gets entered into Rieth-Riley's recordkeeping report kept by J. Berscheit. During the inspection, I observed the natural gas meter, which read 150,223 MMcf natural gas used at the end of the day on 5/12/21. At the time of inspection the gas meter was reading 150,393 MMcf. There are no material limits on the amount of natural gas Rieth-Riley can burn. Rieth-Riley keeps this record reported on a monthly basis in the "12-Month Rolling Report."

Rieth-Riley must keep information sufficient to identify all components of the asphalt mix, which includes recording the initial mix design and time upon initial start-up, and the time and new mix design whenever the mix design changes. I requested these mix design records for May 1-8, 2021. There was no production occurring between May 1st – 3rd. J. Berscheit provided me with the various mix designs that were used during May 4th – May 8th, and then a listing of all the mix designs made that day, by time of day. Mix designs for these days include 500mix, 501 13A, 515 LVSP, 537 13A, and 500A560.

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Stack Restrictions

Rieth-Riley is required to have a stack that is at least 44.3' above ground level. During a past inspection, J. Berscheit explained that the stack is assembled from 2 sections that are each 14.5' long. These two sections, in addition to the fan and damper assembly he said measures about 16.5', total 45.5' from ground level. Since the last inspection, AQD has acquired a Nikon Forestry Pro II Rangefinder for field use, and determination of stack heights is one of these uses. During the inspection I took 2 readings of the stack from 2 different angles, reading from the base of the stack (where ground meets the stack's footing) to the top rim of the stack, using the "2 points mode" to determine the height of the stack between two measured points. The rangefinder measured readings of 35.6 feet and 35.9 feet. I informed J. Berscheit and D. Larson of these readings, and I encouraged them to take their own readings with their own device, if they had one. **Because the stack height, as measured by AQD, was less than 44.3' above ground level, this is a violation of the Stack/Vent Restriction 1.24. A Violation Notice will be sent to Rieth-Riley to address this deficiency.**

EUYARD

EUYARD consists of 3 piles of RAP (recycled RAP millings, sized RAP, and large irregularly shaped RAP leftovers from jobs) and piles of virgin aggregate.

Fugitive dust emissions from the plant roadways, plant yard, material storage piles, and material handling operations are required to be calculated annually for MAERS. Based on the 2020 MAERS emission reporting year, Rieth-Riley is in compliance with this condition.

Rieth-Riley is also required to follow the Fugitive Dust Management Plan in Appendix C. The following is an evaluation of compliance with Appendix C:

SITE MAINTENANCE & MANAGEMENT OF SITE ROADWAYS

Where vehicular traffic will travel, dust suppressant application, sweeping and/or vacuuming or other approved activity is required to be conducted at least twice per month or more frequently, as dictated by weather conditions and vehicular activity. Additionally, during the operating season, the paved plant roads shall be treated with water, vacuumed, or swept in a manner that minimizes the introduction of the dust to the ambient air to control fugitive dust emissions and track-out dust. D. Larson said that nearly the entire plant yard at Rieth-Riley is paved. There are portions of the plant yard, further back, where storage piles sit atop unpaved surfaces, but the bulk of the piles are on paved surfaces.

D. Larson said that Rieth-Riley uses a water truck and a mechanical broom with water to maintain fugitive dust on paved surfaces.

During the inspection I noted that fugitive dust from vehicular traffic on the paved surfaces was reaching upwards of 60-70% opacity, with the sun at my back. I also noted that truck traffic was moving at greater than 10 mph. I made mention of these two concerns to J. Berscheit and D. Larson and asked what Rieth-Riley typically does to control dust and when. D. Larson said the last time they swept was the prior week. No mention of water truck use was made. D. Larson said he would have a crew clean up the dust on the paved portions of the plant yard and send me photos to demonstrate the dust has been cleaned up to my satisfaction, which he provided to me the next day. Additionally, while onsite, he showed me that the 10 mph speed limit sign posted at the entrance to the facility (which is required to be posted per the Fugitive Dust Control Plan) was faded from the sun. During the inspection, D. Larson ordered a new sign to replace the faded sign, and in a followup email on 6/3/21 he sent me a photo of the new posted sign. The photographic evidence provided by D. Larson is sufficient for addressing these deficiencies and a violation for these deficiencies will therefore not be cited.

Records of the dust control activities are required, including the date, time, and what was observed or the reason for the activity (routine or other), and what action was taken. Per my request, J. Berscheit provided me with Rieth-Riley's dust control records for April – May 2021, which contains the date (daily records are kept), whether the plant was operating that day, and the dust control used that day. It was logged that the water truck was used every day of operation for the 2021 operating season. As previously mentioned in this report, D. Larson said that the last time they swept was the week prior to the inspection; the sweeper dust control activity was not logged.

I have made Rieth-Riley staff aware of the following deficiencies and the need for improved recordkeeping (failure to improve recordkeeping in the future may result in a violation notice): All dust control activities, both the sweeper and water truck activities, in addition to logging the time and the reason why the action was taken, need to be logged. Additionally, the water truck alone is not enough for controlling dust on paved roads. Records indicate it was used consistently on a daily basis, and based on the fugitive dust seen from truck traffic during the inspection, the sweeper truck needs to be used more frequently than twice per month when opacity from truck traffic causes excessive fugitive dust like it had during the inspection.

The unpaved portions of the site are required to have dust control to ensure visible emissions are less than 5% opacity. The largest unpaved portion of plant yard that I could see is the unpaved lot near the front of the facility at Creyts Road. During the inspection, I did not note any opacity emitted from this unpaved area.

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 their loads. A sign for the trucks leaving the site is also required to remind them to tarp the loads prior to leaving the site. D. Larson, J. Berscheit and I walked to the exit gate and verified that signs had been installed reminding truck drivers to cover their loads. Additionally, they installed a sign to alert truck drivers that they are under surveillance. All trucks exiting the site covered their loads prior to leaving the property boundary.

MANAGEMENT OF FRONT-END LOADER OPERATIONS

The front-end loader operators are required to avoid the overfilling of the bucket of the loader 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 of these operations during the inspection, thus compliance with this requirement could not be determined.

EUACTANKS

The vapor condensation and recovery system for each liquid asphalt cement storage tank is required to be installed and operating properly.

There are 2 horizontal tanks and 1 vertical tank. The vapor condensation and recovery systems are installed on the 2 horizontal tanks. The vertical tank has a similar recovery system. H. Grifka explained, during the previous inspection, that each vertical cylinder on the tanks has a charcoal adsorber used to control odors. According to the plant maintenance specialist, the vapor condensers have never had to be cleaned. To his knowledge, anytime these condensers have been removed (state-wide) or disconnected they have noted that there was never significant buildup to warrant establishing a cleaning or inspection schedule.

EUSILOS

During the inspection, I watched the loading of a few trucks through the loadout area and did not see any signs of opacity (nor did I detect any odors, but I was standing upwind of the loadout at that time) from unloading nor from the blue smoke control device. The loadout area is required to be completely enclosed. The previous silos have been replaced with 4 new 300-ton silos, as well as the structure that supports the silos and which also is part of the loadout tunnel. The new loadout tunnel is not fully enclosed. There are panels on either side of the loadout tunnel that allow for egress from the truck drivers in the event of an emergency: the bottom of the panels line up with the top of the truck beds. Further internal discussions will be had to address whether this set up meets the intent of the requirement, in light of newly permitted asphalt plant permit requirements.

The asphalt odors/smoke from loadout, as well as from the loadout silos are captured via a new control system, which J. Berscheit had described as "paper filters." J. Berscheit provided me with additional information on these filters, which he said work in tandem: a Camfil Farr 30/30 High Capacity Pleated Panel Air filter and a Camfil

Durafil ES2 (microfiber) Final filter. I have requested an exemption demonstration for the replacement of the previous control device with these two filters.

FGFACILITY

FGFACILITY takes into account all emissions sources and restricts HAP emissions to 8.9 tpy for each individual HAP and 22.49 tpy for aggregate HAPs. This includes emissions from the natural gas burned to heat the heat transfer oil and that which is combusted in the drum mixer. The 12-month rolling time period is from April 2020 – May 2021.

Table 4. HAP emissions, 12-month rolling April 2020 – May 2021.

HAP	Individual (tpy, 12-month rolling)	Compliance with HAP 8.9 tpy limit?
Benzene	3.6	Yes
Ethyl benzene	0.14	Yes
Xylene	0.14	Yes
Toluene	0.86	Yes
Naphthalene	0.14	Yes
Formaldehyde	1.44	Yes
Acrolein	0.14	Yes
Arsenic	0.001	Yes
Nickel	0.015	Yes
Manganese	0.0077	Yes
Lead	0.0003	Yes
Total Aggregate HAPs (tpy, 12-month rolling)	6.48	Compliance with 22.49 tpy limit

The permit does not specify where HAP emission factors used for FGFACILITY should come from.

Compliance Statement: Rieth-Riley is currently in non-compliance with PTI 97-03A, condition number 1.24 for EU001's stack height being lower than the minimum permitted height of 44.3 feet. A violation notice will be written to address this deficiency.



Image 1(Continuous Monitor) : Continuous Monitor screen for product temperature, virgin aggregate feed, RAP aggregate feed, etc.



Image 2(New Silos) : 4 new 300-ton silos with new loadout tunnel



Image 3(Loadout Tunnel) : New loadout tunnel with new control device



Image 4(Loadout Control) : New control system close-up. No opacity seen from unit during loadout activities.



Image 5(Gas-fired boiler) : Natural gas-fired boiler used to heat the heat transfer fluid for warm the AC tanks and silos.



Image 6(baghouse filters) : 4 boxes of new baghouse filters kept in inventory



Image 7(Exit signs) : Cover load sign prior to exiting facility.



Image 8(Speed Limit sign) : Faded 10 mph speed limit sign during inspection.



Image 9(New Speed Limit sign) : Photo credit: Dan Larson, Rieth-Riley. New sign posted to replace faded sign.



Image 10(Baghouse dP) : Pressure drop monitor for baghouse control. Photo credit: John Berscheid, Rieth-Riley



Image 11(Dust Control) : The "after" photo taken by Dan Larson to demonstrate Rieth-Riley has worked to clean up surface dust from paved areas of site to minimize fugitive dust from vehicular traffic.



Image 12(Sweeper Truck) : Sweeper truck to be used in conjunction with water truck.

NAME Michelle Luplow

DATE 6/9/21

SUPERVISOR B. M.