

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

A009859463

FACILITY: EVERETT GOODRICH TRUCKING INC		SRN / ID: A0098
LOCATION: 5614 Wessel Road, ALPENA		DISTRICT: Gaylord
CITY: ALPENA		COUNTY: ALPENA
CONTACT: Brian Knapp , Plant Manager		ACTIVITY DATE: 05/03/2021
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Onsite inspection and records review for small HMA Batch Plant for FY 2021. sgl		
RESOLVED COMPLAINTS:		

On May 3, 2021, AQD District Staff conducted a scheduled site inspection of the Everett Goodrich Inc. site (AKA Everett Goodrich Trucking and Goodrich Trucking) located at 3851 Werth Road, Alpena, Alpena County, Michigan (A0098). The referenced Facility is a Hot Mix Asphalt (HMA) operation purchased by the present owner in 1996. It operates under Permit to Install (PTI) 221-99A. The most recent Full Compliance Evaluation (FCE) associated with the site was conducted on June 9, 2017.

At the time of the inspection, the Facility was just starting the 2021 operating season. The previous HMA operating season ended on November 23, 2020. Brian Knapp answered questions and provided information to AQD District Staff. May 3, 2021 was to be the first day of production for the 2021 season. However, spring rains had delayed the start of the season.

Weather conditions at the time of the inspection consisted of overcast skies, some fog, and intermittent showers. Temperatures were in the mid 40's.

FACILITY

The Facility is an HMA plant, located north of Alpena, Michigan. Until purchase in 1996 by Everett Goodrich Trucking, the Facility was owned and operated by Alpena Paving Co.

Initial permits identified the facility as consisting of a Heatherington & Bernier 5000 asphalt batch plant. The HMA plant location is 5614 Wessel Road, Alpena, Michigan, in the NE ¼ of Section 35, T 32N, R8E of Alpena Northwest township. The Goodrich Trucking office is located on Werth Road, Alpena Michigan.

To get to the HMA plant travel north of Alpena on U.S. Highway 23 until you reach Bloom Road. Make a right on Bloom Road and travel:

1. approximately 1.5 miles to Wessel Road, make a right on Wessel Road, and travel south approximately 0.5 miles, the Plant entrance is on the right.
2. to the intersection of Bloom Road and Long Lake Road (apx. ½-mile), the plant entrance (gated) with a sign is located immediately east of the intersection on the south (right-hand) side of the road. The paved drive associated with this entrance is approximately 1-mile long.

The Office for Goodrich Trucking is located at 3851 Werth Road, Alpena.

Facility staff indicated that the plant produces principally one of three grades/mix of HMA. HMA product is principally sold for residential paving, parking lots and some airport paving jobs. A review of production data appeared to indicate that the same mix was produced for the entire 2020 calendar year.

Facility records consist of daily logs which appear to document all required daily activities such as the days production, hours of plant operation, NG usage for the dryer burner and asphaltic cement heater/boiler amongst other information.

EQUIPMENT

Discussions with office staff indicated that there have been no changes to the HMA plant since purchase. The existing HMA Batch Plant is natural gas -fired 2.5-ton (5000 lb) batch plant and per permit application consists of:

- Rotary Drum Aggregate Dryer (with baghouse)

The existing aggregate rotary dryer is controlled by a bag house. The existing baghouse is reported to hold a total of 336 bags, all of which were reported to be replaced prior to the 2021 paving season. 80 spare bags remain onsite. The baghouse has a high temperature alarm, and temperature sensor.

- Liquid Asphalt Heater

The existing liquid asphalt heater consists of a Gencore Hi-way Boiler with a rating of one (1) MMBTU/Hr.

- Aggregate Dryer Burner

Consists of a 52.2 MMBTU/Hr Jet Burner model JB250-52 burner.

Additional equipment included :

- Elevator Operations
- Storage Piles
- Cold Aggregate Handling
- 100 ton HMA storage silo
- Asphalt cement storage tank (dual compartment)
- Electric generator

The Facility makes use of a diesel powered, CAT 3412, V12, 4-stroke, lean burn, 500 KW/750 HP CAT, remote, non-emergency, generator (Sn 38S3111). Per Facility staff the CI generator had been installed by the previous plant owner. Based on site maps included in permit application 52 -76B (received 2/21/1992) it is clear that the diesel generator was identified as a plant component, and reflects original equipment without permit conditions.

Process Description –The batch process begins with the aggregate feed bins, the contents of which are conveyed to the rotary kiln and dried. The dried aggregate is transferred via bucket elevator to the top of the plant where it is dropped onto the screen deck. The aggregate is screened, separated, and stored in individual bins (sand and gravel). The sized materials are transported to the weigh hopper and then added to the mixer compartment in predetermined amounts. The dried and weighted aggregate is mixed, asphalt cement is then added and mixed for less than half-minute and the asphalt paving material is then conveyed to the storage silo for short-term holding.

Per permit application, the plant operates at a production rate of 150 tons per hour. Per Facility Staff, the plant operates at under 100 tons per hour.

PERMIT HISTORY

The Facility is identified as a major source of HAPs, and a minor source of CO and PM. A summary of PTIs issued for the Facility is summarized below:

PTI	Issued On	Comment
52-76	April 12, 1975	Issued to Alpena Paving Co.
52-76A	July 28, 1989	Issued to Alpena Paving Co.
52-76B	April 6, 1992	Issued to Alpena Paving Co. for replacement of aggregate dryer and hot elevator
52-76C	March 25, 1994	Issued to Alpena Paving Co for replacement of wet scrubber with baghouse
221-99	August 24, 1999	Issued to Everett Goodrich Trucking for 5000 pound batch mix HMA plant. Issued as an opt-out permit.
221-99A	December 1, 2004	Issued to Everett Goodrich Trucking, increase in particulate limits to existing permit

As seen above initial permitting was conducted in 1976 for the batch plant. Of interest is that the diesel generator is not called out as an emission source (but is present in Facility site maps) nor in any subsequent inspection reports. This may be due to an exempt status at the time of initial permitting as well as subsequent permits. A review of historical exemption rules indicated two potential exemptions that may have applied at the time of initial permitting and include the following:

Rule 336.33(f) (1967) identified "*Gas fuel and No. 1 and No. 2 fuel oil burning equipment used for space heating, service water heating and electric power generation*" as exempt from Rule 201 permitting. A later version of this rule (1973) identified "*Gas No.1 and No.2 fuel oil burning equipment with a maximum heat input of 10 million BTUs/Hour used for space heating, service water heating, or electric power generation and indirect heaters used in oil and gas producing and process operations*". This condition remained relatively unchanged until 1992, when the regulations was updated to the present requirements.

Rule 336.36 (c) (1967) exempted any " *internal combustion engines.*" This rule remained unchanged until 1980 when it became Rule 285(c) and exempted "*Internal combustion engines that have less than 10,000,000 BTU/Hour maximum heat input*".

As of 2016, RICE exempt from Rule 201 permitting must demonstrate compliance with Rules 278 and 278a and must meet one of the following conditions:

- Rule 282(2)(b) Fuel burning equipment used for space heating, service water heating, electric power generation oil and gas production and processing or indirect heating and which burns only the following fuels.(ii) No. 1 and No.2 fuel oils, distillate oils, the gaseous fuels specified in paragraph (i) of this subdivision, or a combination thereof that contains not more than 0.40% sulfur by weight and the equipment has a rated heat input capacity of not more than 20,000,000 BTU/hour. or
- Rule 285(2)(g) Internal Combustion Engines that have less than 10,000,000 BTU/Hour maximum heat input.

At the time of report preparation, the Facility is still in the process of trying to locate information regarding heat input for the engine onsite. Due to date of installation prior to 2006, the engine would not have any requirements under the New Source Performance Standards of 40 CFR Part 60. However, there would still be requirements under 40 CFR Part 63 Maximum Achievable Control Technology (MACT) standards for RICE.

FEDERAL REGS

The referenced Facility is subject to New Source Performance Standards (NSPS) for Hot Mix Asphalt Plants (40 CFR Part 60, Subpart I). This determination is based on the construction or modification of the HMA plant after June 11, 1973 (40 CFR Part 60.90).

Standards under the referenced subpart are limited to a maximum of 0.04 grains PM per dry standard cubic foot of exhaust gas (gr/dscf) and VE's of 20% opacity (40 CFR 60.92). Compliance with the subpart is determined by verification stack testing for PM concentrations and Method 9 for VEs (40 CFR Part 60.93). It should be noted that SCs in PTI 221-99A do not include VEs, the 20% opacity limit is referenced in the General Conditions of the permit.

The existing HMA plant utilizes a NG-fired jet burner for the aggregate dryer and a NG-fired process heater to warm asphaltic cement. Due to experiences with burners on EUs at other source categories at other Facilities being found to be subject to the Boiler MACT District Staff evaluated the two process heaters for 40 CFR Part 63, Subpart JJJJJ, the Boiler MACT for area sources. The referenced area source subpart does apply to boilers and process heaters using gaseous fuels, and so is not applicable to either heater.

In addition, based on the presence of a diesel-generator installed prior to 1999 the Facility appears to be subject to 40 CFR Part 63, Subpart ZZZZ (RICE MACT). Based on information provided by the Facility, the unit would be considered a remote unit, having fewer than 5 dwellings within a quarter-mile radius. At the time of the inspection, AQD does not have delegation for the referenced subpart with reference to minor sources. The Facility has been provided with information regarding the referenced regulations applicable to the onsite equipment.

COMPLIANCE

Compliance History – A review of available District files indicated that the Facility was issued a consent order (7-2005) in April 2005. A review of District files indicate that the consent order was issued to resolve a violation notice dated August 3, 2004 for exceedance of PM emission limits. Verification testing conducted on June 29th and June 30, 2004, by Dorenzo and Associates, Inc. reported a PM average concentration of 0.11 gr/dscf. PTI 221-99 limited PM emissions to 0.04 gr/dscf and 0.73 lb/hr.

In response to the referenced 2004 test results, the Facility on August 27, 2004, requested a permit modification to PTI 221-99A PM limits. Retesting was reported to have been completed on September 21, 2004. PTI 221-99A was issued following receipt of the test results, which confirmed emission concentrations in compliance with the referenced permit.

Consent order 7-2005 was terminated on November 5, 2013.

MAERS -The Facility submits annual emissions reports under the MAERS program. Submittals appear to have been complete and submitted in a timely manner.

Complaints – For the period following the 2017 inspection no complaints are of record.

Permit Compliance – Permit 221-99A identifies three EUs (EUHMAPLANT, EUYARD, EUACTANKS) and defines applicable requirements for the HMA Plant.

EUHMAPLANT –

The EU consists of the HMA plant, including the aggregate conveyors, the asphalt rotary drum dryer and the fabric filter dust collector. It should be noted that high level citations for compliance with 40 CFR part 60, Subpart I, the HMA NSPS are contained within PTI 221-99A.

The stack requirements for SVHMAPLANT, is a maximum of 4.0 square feet in diameter and a minimum height of 30.0 feet above land surface (SC 1.22). Facility staff indicated that no changes to the baghouse stack height had occurred, and a visual inspection failed to identify signs of any extensions or recent modifications. Visually the stack appears to meet the minimum height requirement. The stack itself is square and appears to meet the 4 square foot threshold.

Emission Limits – Permit 221-99A contains the following emission limits presented in SC 1.1a through 1.1e:

Pollutant	Emission Limit (gr/dscf)	Emission Limit (pph)	Emission Limit (lb/ton)	Emission Limit (tpy)
PM	0.04	5.9	NA	NA
CO	NA	NA	0.198	7.43
Lead	NA	2.0 E-6	NA	NA

It should be noted that the annual limits are based on a thruput of 75,000 tons HMA production.

Annual Emissions reported by the Facility for the plant is determined using a combination of stack test data (PM10 primary and PM2.5 filterable) and MAERS EFs. The following summarizes annual reported emissions for the Facility since the previous site inspection. Note that PM was determined using MAERS EF prior to 2019.

Calendar Year	PM (tpy)	CO (tpy)	Lead (lb/yr)	Material produced (tpy)
2020	3.09	1.55	0.01	23,792
2019	3.03	1.49	0.01	22,858
2018	0.07	1.36	0.01	20,988
2017	0.08	1.54	0.01	23,683
Limit	NA	7.43	NA	75,000

Material Limits – The permittee is limited to NG fuel for EUHMAPLANT (SC 1.2). This was confirmed by Facility Staff at the time of the May 3, 2021, site inspection. No limits with respect to fuel usage are included in the PTI. Totalizing meters are present for both the aggregate dryer burner and the asphaltic cement heater/boiler. Totalizer readings are recorded daily by the plant to document fuel usage.

The permittee is limited to a production rate of no more than 110 ton/hour (daily average) (SC 1.6) and a 12-month rolling production limit of 75,000 tons of HMA paving materials (SC 1.5). As indicated by the data reported in MAERs, the annual production volumes for the past 4 years are well below the permit limit.

With reference to the hourly rate, the facility determines production rates by dividing the volume produced by the operating hours. Production rates noted in records as part of the May 3, 2021, site inspection were under 100 tons per hour, and in compliance with permit limits.

SC 1.20 requires HMA records for hourly, monthly and 12-month rolling HMA production. SC 1.21 requires the documentation of daily hours of operation of EUHMAPLANT. As previously indicated, daily hours of operation are reported on handwritten daily logs, this information is verified by heat-recording charts kept by the Facility to document start and stop times as well as plant temperatures over the course of the day. Production is based on and limited to orders.

Daily records are provided to the office staff, who determine monthly and season totals in compliance with permit conditions.

SC 1.3 restricts the permittee from using any asbestos tailing or asbestos waste materials in the production of HMA. SC 1.4 restricts the permittee from using Recycled Asphalt Product (RAP) materials without prior notification and approval by the AQD. No piles of asbestos tailings, shingles, or other suspect asbestos waste materials were noted onsite. Some Asphalt material piles were noted onsite, but no RAP material piles were noted in the immediate area of the plant, and the Facility Staff indicated that though use of RAP has been evaluated onsite. The Facility indicated that the costs associated with adding RAP to the product were cost prohibitive. AQD Staff discussed that addition of RAP to HMA product would require a permit modification.

Process/Operational Limits – Process and operational limits for EUHMAPLANT include a program for fugitive emission controls for EUYARD as specified in Appendix A. (SC 1.7) Activities in Appendix A include but are not limited to:

- Dust in area of vehicular travel being controlled by an application of water, sweeping, vacuuming or other acceptable control method.
- Speed limits of 10 mph or less with signs posted to advise drivers of the speed limit.
- Watering, covering or encrusting piles of raw materials to prevent fugitive dust.
- Stock piling will be done to minimize free fall distances.
- Paved roadways for HMA haul vehicles.
- Prompt removal of aggregate spillage from roadways.
- Loads both incoming and outgoing shall be required to be covered.
- Front end loader operator will not overload bucket or feed hoppers and will minimize the drop height.
- Repair of any leaks or malfunctions from equipment that results in fugitive emissions.
- Maintain records of all fugitive dust control activities conducted onsite.

Discussions with Facility staff and review of the previous seasons records indicate that the Plant is in general compliance with the Fugitive Dust Control Program. Evening rains had wetted the unpaved work areas, and the material storage piles. Staff indicated that sweeping and watering was conducted daily. Signs indicated that there was a speed limit. All loads were reported to be tarped. AQD Staff suggested that supplemental daily documentation may be considered to better document the range of dust control activities conducted onsite.

The permittee is required to maintain the efficiency of the EUHMAPLANT drum mix burners by fine tuning the burners for proper burner operation and performance and to control CO emissions (SC 1.8) Communications with AQD permit engineers found in district files indicate that proper operation would result in CO emissions of less than 500 ppm. Discussions with Facility staff indicated that the Facility checks the burner with respect to CO emissions on a monthly basis. CO concentrations ranged from 150-180 ppm and are taken with a Bacharach CO meter kept onsite.

SC 1.9 restricts the permittee shall not operate EUHMAPLANT unless the fabric filter dust collector is installed, maintained and operated in a satisfactory method, which is defined by permit as a differential pressure between 2 and 8 inches of water column. Available records indicated that the differential pressure for the previous year was a consistent 3.5 inches of water. When commented on by AQD District Staff, Facility Staff indicated that the facility adjusts

the feed rate to help maintain a consistent differential pressure and proper operation of the baghouse.

Monitoring Requirements – The permittee is required to install, calibrate, maintain and operate in a satisfactory manner a device to monitor:

- Virgin aggregate feed rate to EUHMAPLANT continuously (SC 1.10)
- Pressure drop across the fabric filter dust collector, with a accuracy within plus/or minus 2-inches of water and calibrated annually and recorded daily (SC 1.13)

Both monitoring devices have been installed and were reported to have been inspected and the calibration checked at the time of the site inspection.

Per SC 1.11, the permittee shall monitor, with a handheld CO monitor, the CO emissions from EUHMAPLANT and the production data associated with the time the emissions data was collected. Each data set shall be recorded at the start-up of each paving season, at each malfunction and after every 500 hours of operation. Each data set shall consist of at least eight separate CO readings taken over a period of 30 minutes (or longer). Records of the CO readings are required under SC 1.19. Discussions with Facility Staff indicated that though personnel are monitoring the burner CO concentrations on a monthly basis. They were unaware of the requirement for start-up and 500-hour CO emission checks of the burner, nor the requirement for 8 separate readings over a half hour period. Records for the 2021 paving season will be adjusted accordingly.

Recordkeeping/Reporting Requirements – SC 1.14 requires that all required calculations shall be completed in an acceptable format by the 15th day of the calendar month, for the previous calendar month.

The permittee is required under SC 1.16 to maintain a log of all significant maintenance activities conducted and all significant repairs made to EUHMAPLANT and maintain all necessary maintenance and all necessary attempts to keep all components of EUHMAPLANT maintained and operating in a satisfactory manner at all times. As part of the site inspection, AQD District Staff was shown a summary spreadsheet as well as a file of garage work orders verifying that the facility is conducting appropriate maintenance activities.

Maintenance records for the fabric filter dust collector shall be consistent with the preventative maintenance program in Appendix B. Components of the preventative maintenance program include:

- The pressure drop across the fabric filter dust collection shall be continuously measured and the minimum pressure drop shall not be less than 2-inches unless a large number of filter bags have been replaced or other acceptable reason.
- The pressure drop across the fabric filter dust collector shall be recorded at least once per day and kept in a bound notebook.
- The fabric filter dust collector shall be equipped with a high temperature sensor and alarm system. The alarm system designed to set off an alarm when the high temperature set point was exceeded.
- Accumulated dust shall be stored and/or be disposed of in a manner which minimizes the introduction of the air contaminants to the outer air.
- Piping and seals shall be replaces as needed.

As previously indicated the Facility is in general compliance with permit conditions for the above components of the preventative maintenance plan.

- If the 20% opacity general condition appears to be exceeded, a certified reader must verify levels within 60 minutes or the plant shutdown and the source determined. If visible emissions continue for more than 2 hours, in excess of 20% an excess emissions report must be made to MDEQ.

Discussions with Facility staff indicated that the Facility does not have a certified reader on staff. Plant operator reports that the equipment is shut down as soon as emissions from the baghouse are out of normal range to evaluate the problem and make corrections.

- Black light test/inspections shall be conducted at least once per year, before a paving season.
- An inventory of fabric filter bags shall be maintained by the facility owner or operator. Filter bags must be available within 4 hours of request. A minimum of 15 bags shall be kept onsite at all times.
- Records required to be in a bound notebook included the date and time of:
 - Visual inspection of interior components of the fabric filter dust collector.
 - Black light inspections.
 - Number of filter bags installed as a result of each inspection
 - Description of the damage found for each filter bag removed.
 - Each observation of visible emissions at the stack discharge point.
 - All significant maintenance activities performed on the fabric filter dust collector.

Discussions with Facility staff indicate that the staff makes frequent visual inspection of the baghouse, black light inspections are conducted when visual inspection shows any collection of dust that would indicate issues. The most recent inspection was conducted at the end of the previous season, black light was conducted, and the facility reported that all the bags in the baghouse were replaced. AQD District Staff discussed better documentation of baghouse inspection and maintenance activities for future events. Documentation observed in Facility files though sufficient to determine that the activities were completed, could have used supplemental information to further clarify the activities. All records are to be kept on file for 5 years.

Intermittent daily records of the following production records are required to be kept (SC 1.17):

- The virgin aggregate feed rate
- The asphalt paving material product temperature
- Information insufficient to identify all components of the asphalt paving material mixture.

In addition, SC 1.17 requires upon startup and at the time of each new mix, the initial mix design and the time started. Facility staff reported that sufficient information to meet SC 1.17 are recorded, and is monitored on the computer screen in the control room.

SC 1.18 requires the permittee to keep monthly and 12-month rolling time period for PM, CO and Lead. Stack test data should be used to estimate applicable emissions. Emissions data is maintained by office staff and was provided upon request. Copies of records for the 2020 paving season were provided for review as a part of the May 3, 2021 site inspection.

EUYARD –

The permittee is required to implement the program for fugitive emission control as specified in Appendix B (SC 2.1). Activities conducted under the fugitive emission control plan are summarized under EUHMAPLANT (SC 1.7).

SC 2.2 requires that the facility determine annual fugitive dust emission of PM for EUYARD. These are reported annually by the Facility as part of their annual MAERS reporting. As previously indicated that Facility is operating in general compliance with the fugitive dust program of PTI 221-99A. Fugitive emissions are reported annually as part of the MAERS program.

EUACTANKS –

The permittee shall not operate EUACTANKS unless the vapor condensation and recovery system is installed, maintained and operated in a satisfactory manner. The Facility reports that the required vapor condensation and recovery system is installed and operated in compliance with permit conditions.

SUMMARY

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Sharon LeBlanc Digitally signed by Sharon LeBlanc
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Shane Nixon Digitally signed by Shane Nixon
Date: 2021.09.08 12:44:36 -04'00'
SUPERVISOR _____