

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

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| FACILITY: MHA Recycling LLC | | SRN / ID: N8267 |
| LOCATION: 4365 EVANSTON AVE, MUSKEGON | | DISTRICT: Grand Rapids |
| CITY: MUSKEGON | | COUNTY: MUSKEGON |
| CONTACT: Scott McDowell, Owner | | ACTIVITY DATE: 04/05/2018 |
| STAFF: Chris Robinson | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: MINOR |
| SUBJECT: FY '18 on-site inspection to determine the facility's compliance status with PTI No. 183-14 and other applicable air quality rules and regulations. | | |
| RESOLVED COMPLAINTS: | | |

AQD staff Chris Robinson was on-site to conduct a scheduled unannounced inspection on Thursday April 5, 2018. AQD staff arrived at MHA Recycling LLC, formerly known as Crutchall Resource Recycling (Crutchall), located at 4365 Evanston Avenue, Muskegon, Michigan, at approximately 12:00 pm and met with Jerry McDowell, former owner and father of the current owner, Scott McDowell. Jerry McDowell is still involved with MHA as needed. CR spoke with Scott McDowell on April 18, 2018 who confirmed Jerry as the correct Air Quality contact for MHA. AQD staff presented Mr. McDowell with proper AQD credentials and a business card and informed Mr. McDowell of AQD's intent to conduct an inspection of the facility to determine compliance status with respect to Permit to Install (PTI) number 183-14 and any other applicable air rules and regulations.

No odors or visible emissions were observed during this inspection. However, staff onsite were only sorting material, not grinding. MHA reached storage capacity and has not been able to accept additional material since 2016. Grinding operations are tentatively planned to start up in late April to early May of 2018.

Facility Description

The facility is an asphalt shingle recycling plant that began operations on June 8, 2009. Processed material consists of residential shingles that are brought to the facility from waste haulers, roofers, and residential home owners and manufacturer by-products consisting of end cuts or clean tear-off scrap. The facility is not permitted to accept commercial or industrial roofing waste. The shingles are brought to the facility and dumped in the receiving area, visually inspected for asbestos and then sorted for unacceptable waste (such as plastic, paper, metal, and wood). Unacceptable waste is placed into a separate roll-off container that is eventually sent to the landfill. Once laboratory samples confirm the lack of asbestos, the shingles are then stockpiled with the existing shingles at the facility. Each drop is identified with a receipt containing customer/contractor information, location of the roofing job, quantity of material dropped off and statements indicating that the "shingles are free of asbestos and other hazardous waste" and that the "shingles are from a residential structure consisting of four (4) units or fewer".

Compliance Evaluation

PTI No. 183-14

MHA operates under PTI 183-14, which was issued on December 4, 2014. Prior PTI's 128-09, 182-12 and 183-14 have been voided. Permitted equipment and processes at this facility are as follows:

| Emission Unit ID | Emission Unit Description (Process Equipment & Control Devices) |
|-------------------------|---|
| EU-Process | Material sorting and separation. Grinder: Getz M30 Rubble Hog Hammermill/Crusher powered by an electric 60 HP motor. After grinding the material will be run over a cross belt magnet to remove nails and screened by an electric powered Getz horizontal shaker deck screener. Equipment includes areas and methods used to sort useable shingles from scrap material, material handling and transporting of material to storage areas. Control methods may include equipment enclosures, water sprays, drop chutes and/or pant legs for transfer points and work practices to minimize the generation of fugitive dust. |
| EU-Truck Traffic | Truck traffic for transfer of material to and from the facility and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks. All commercial truck areas and unpaved yard areas. |
| EU-Storage | Protected area stock piles of unprocessed shingles and ground shingle product material. |

- EU-Process

As discussed with Mr. McDowell during the inspection, MHA only processes material as allowed in PTI No. 183-14 EU-Process Special Conditions one (1) and two (2), which prohibits asbestos containing material and allows for shingle manufacturer by-product shingle waste material (end cuts) or clean tear-off asphalt shingle scrap as outline in the following table:

| | |
|-----------------------------------|--|
| <p>Acceptable Material</p> | <p>- Asphalt shingle manufacturer by-product (end cuts) - Tear-off asphalt shingle scrap and other incidental roofing waste from private, residential homes only, no larger than four-units per structure. Processing of incidental roofing waste shall be minimized, but less than 2% by weight of material such as felt attached to shingles, wood, cardboard, flashing, nails, or plastic wrap may be processed. - Shingles shall meet the American Society for Testing and Materials (ASTM) specifications for roofing shingles: ASTM D 225-86 (Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules) or ASTM D3462-87 (Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules)</p> |
| <p>Prohibited Material</p> | <p>Unacceptable materials include: household trash, paint, solvents, gasoline, anti-freeze, dead animals, asbestos, explosives, or any other material deemed hazardous or inappropriate by the AQD district supervisor.”</p> <p>The following materials shall not be processed:</p> <ol style="list-style-type: none"> 1. Cementitious shingles, shake shingles, and transite siding that may be suspect asbestos containing material. 2. Roll roofing, built-up roofing, tile, cedar shake shingles, coal tar, rubber, slate, or metal roofing or roofing from commercial buildings 3. Any type of hazardous waste (e.g., mercury containing devices such as thermostats, paint, solvents or other volatile liquids, etc.). 4. Significant amounts (more than 2 percent by weight) of other debris that is not asphalt shingles (e.g., plastic, paper, glass, metal, or trash). |

EU-Process is subject to an emission limit of 10% opacity, as noted above no visible emissions were observed during this inspection. The grinder is equipped with a water spray system for dust suppression and the stockpiles and lot are “watered” on an as needed basis. Mr. McDowell indicated that dust is minimal, and the material tends to retain moisture, helping to minimize dust. Records of watering/dust suppression applications are not being maintained by the site as required in Appendix A (Fugitive Dust Control Plan) of the PTI.

MHA has implemented and maintained a fugitive emissions control plan (Appendix A of the PTI) covering the roadways, the plant, the yard, stockpiles and all material handling operations. As well as the sampling and testing plan outlined in Appendix B of the PTI.

Each load of shingles is inspected for possible asbestos containing material and a record, example attached, is created containing the following information as required by Special Condition VI(3):

- a. A statement that the tear-off shingle scrap was generated at private, residential homes only, no larger than four-units per structure, and that the residential buildings are not regulated facilities under the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M.
- b. Residential re-roof customer address(es) where the tear-off shingle scrap originated
- c. A statement that the roofing waste material consists of asphalt shingles and associated roofing debris and contains no hazardous material.

Special Condition V(1) requires MHA to conduct a visible emissions evaluation within 60 days after achieving maximum production rate but not later than 180 days after permit issuance. This evaluation has not yet been conducted. PTI 183-14 was issued on December 4, 2014, far exceeding the maximum 180-day requirement. CR Spoke with Mr. McDowell on April 18, 2018 to determine if MHA had ever reached a "maximum production rate". Mr. McDowell indicated that due to low demand and sorting processes, he did not believe that a maximum production rate had been achieved since permit issuance. The Getz M30 Rubble Hog Hammermill/Crusher is rated at approximately 15-20 Tons/hr. Records indicate that MHA has operated for approximately 615 hours since 2016. Based on the 615 hours of operation and the maximum production rate of the grinder (20tn/hr), MHA could have produce approximately 12,300 tons of material. Records indicate that only 4,400 tons of material have been produced since 2016, suggesting that MHA has not yet reached a maximum production rate. A violation letter will not be issued at this time, However, CR informed Mr. McDowell of MHA's obligation to conduct the emissions evaluation and required testing to be conducted once production resumes.

Special Condition V(2) and Appendix B (Asbestos Testing and Site Management Plan) requires MHA to collect samples for asbestos analysis per every 250 tons of shingles received. Mr. McDowell provided laboratory

Analytical reports, which are included on the attached CD, from December 2015 through October 2016. The Lab method for determining asbestos appears to be Polarized Light Microscopy and Dispersion Staining (PLM/DS) (EPA-600/M4-82-020, EPA-600/R-93-116) which is required by the permit. No asbestos was identified in any of the samples. However, the lab report did note the following:

"In any given material, fibers with a small diameter (<0.25mm) may not be detected by the PLM method. Floor tile and other resinously bound material may yield a false negative if asbestos fibers are too small to be resolved using PLM. Additional analytical methods may be required. The lab recommends using Transmission Electron Microscopy (TEM) for a more definitive analysis".

- EU-Truck Traffic & EU-Storage

EU-Truck Traffic and EU-Storage are subject to emission limits of 5% opacity. This includes wheel loaders and truck traffic and all storage piles. The site is "watered" on an as needed basis for dust control. As noted above, dust is minimal due to the type of material. MHA has implemented and currently maintains a fugitive emissions control plan (Appendix A of the PTI) covering the roadways, the plant, the yard, stockpiles and all material handling operations. Records of watering/dust suppression applications are not maintained by the site as required in Appendix A of the PTI.

MHA staff were aware of the maximum stockpile height limit of 20-feet. None of the stockpiles appeared to exceed this limit.

- Appendices A & B

MHA appears to be properly implementing Appendix A and Appendix B requirements except for maintaining watering/dust suppression application records as specified in Appendix A (I)(A) and III(B).

Compliance Determination

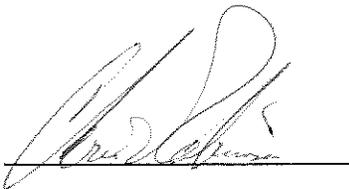
Based on the observations made at the time of this inspection and a subsequent review of the records provided by Mr. McDowell, MHA does not appear to be in compliance with all testing and recordkeeping requirements as outlined in PTI No. 183-14. Due to the current operational status of the facility, a violation notice will not be issued at this time. However, an emissions evaluation is required once production resumes and a follow-up inspection is recommended.

Attachments

Records

Laboratory Results (CD)

NAME



DATE

4/27/2018

SUPERVISOR

