

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

N522359982

FACILITY: Bandit Industries		SRN / ID: N5223
LOCATION: 6750 MILLBROOK RD, REMUS		DISTRICT: Bay City
CITY: REMUS		COUNTY: ISABELLA
CONTACT: Jason Daws ,		ACTIVITY DATE: 09/14/2021
STAFF: Nathanael Gentle	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled on-site inspection.		
RESOLVED COMPLAINTS:		

On September 14, 2021, AQD staff conducted a scheduled onsite inspection at Bandit Industries, SRN N5223. Staff arrived onsite at 9:55 AM and departed at 11:00 AM. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) Administrative Rules; and to evaluate compliance with the facilities Permit to Install (PTI) No. 397-93B. EGLE staff were assisted onsite by Bandit Industries personnel, Mr. Jason Daws, Mr. Chris Malek, and Mr. Pat Kyser. At the time of inspection, the facility was found to be in compliance.

Facility Description and History

Bandit Industries is located at 6750 Millbrook Rd, Remus, MI 49340. The facility manufactures tree stump grinders, hand fed woodchippers, large scale horizontal grinders and whole tree chippers. As part of onsite activities, three coating booths and surface prep operations are utilized and permitted by PTI No. 397-93(B). The facility is a synthetic minor source for hazardous air pollutants (HAPs). The facility was last inspected in July 2019. During the 2019 inspection, the facility was found to be out of compliance.

Three Violation Notices (VNs) are associated with the facility. The first VN was issued in August 2017. Violations cited in the 2017 VN included operating a cold cleaner without the proper operating instructions posted, conducting surface preparation activities using an acidic solution without the proper PTI, installation of a paint booth without a PTI and improper record keeping for usage and emissions. Following the 2017 VN, the facility submitted an application for a PTI modification. A revised permit, PTI 387-93A was issued on December 27, 2018.

The second VN issued to the facility was issued in August 2019. Violations cited in the 2019 VN were improper record keeping for usage and emissions records. In response to the VN, the company hired a consultant who helped put together a record keeping system.

The third VN was issued in January 2020. The VN was for a second stack being installed without the necessary PTI. To correct the violation, a revised PTI, PTI No. 397-93B, was issued on March 23, 2020.

The facility is currently subject to an Administrative Consent Order (ACO), AQD No. 2020-17. As part of the consent order, the facility shall comply with the record keeping requirements as specified in PTI No. 387-93B, as amended. In addition, the facility is required to submit four (4) quarterly reports containing EUPRETREAT, FGCOATING, FGMETALPARTS and FGFACILITY records

required by PTI No. 397-93B, as amended, to the AQD Bay City District Supervisor. The facility has been submitting the quarterly reports timely and complete. As part of the September 14, 2021 inspection, received quarterly records were reviewed.

EUPRETREAT

Material is prepped for painting by spraying the material with an acid pretreat solution. The pretreat solution cleans and etches material. Pretreat solution arrives in 55-gallon drum barrels. The barrels are sealed and stored in a material storage building onsite when not in use. When a barrel is in use, it is attached to a specialized sprayer which mixes the pretreat material with water, which is then sprayed on products to be painted. While attached to the sprayer, the barrel is closed. In addition, all barrels remain closed when not in use to minimize fugitive emissions, S.C. III. 2. The solution of used pretreat material and water collects in drains in the facility floor where it flows to an onsite evaporator. Facility personnel report the waste solution contains approximately 1.5% pretreat solution. The waste solution runs through a series of tanks to allow for material to settle out. The liquids are then sent to the evaporator. Material that settles out in the storage tanks is pumped out and properly disposed of by Safety-Kleen, S.C. III. 1.

Pretreatment material usage is monitored, and records are maintained. Fluid levels can be observed in the barrels in which pretreatment material is stored. Facility personnel measure the fluid levels of barrels in use daily. The level is marked by hand on the side of the barrel with a marker pen. When a new barrel is started, records are recorded to track the number of barrels used. At the end of every month, the facility updates excel spread sheets with the material usage notes. Facility personnel regularly monitor material usage to ensure they do not surpass the usage limit. Maintenance is conducted monthly by the manufacturer on the pretreat sprayer units to ensure the equipment is operating properly.

Records of pretreat material usage were reviewed for the period of January 2019 to June 2021. During the reviewed period, the highest monthly usage occurred in June 2021 with 424.125 gallons/month used. The lowest monthly usage occurred in both January and February with 0 gallons used in those months. The second lowest monthly usage occurred in April 2020 with 61.25 gallons/month used. Monthly usage amounts are recorded into a digital spreadsheet which calculates the 12-month rolling time period usage. During the time period of records reviewed, the highest 12-month rolling time period usage occurred at the end of June 2021 with 3,761.7 gallons/12 months used; this amount is below the permitted limit of 3960 gallons of pretreatment material per 12-month rolling time period, S.C. II.1.

FGCOATING

After completing pretreatment, materials are coated in one of the facilities three onsite paint spray booths. Each paint booth is equipped with exhaust filters. The filters are changed regularly. Facility personnel report the filters in each booth are changed every 2 days or sooner, S.C. IV. 1. Spent filters are allowed to dry and then properly disposed, S.C. III.1. Each paint booth is equipped with both air-assisted airless and electrostatic spray applicators, S.C. IV. 2. The air-assisted airless applicators are used for the application of primer, while the electrostatic applicators are used to apply the paint coatings. The primer used by the facility is an epoxy based. Paint used is polyurethane based.

The volatile organic compound (VOC) content, water content and density of material used in FGCOATING is determined using the manufacturers formulation data, S.C. V. 1. Written approval for the facility to use the manufacturer formulation data rather than completing Method 24 testing was provided to the facility on February 27, 2019, by the AQD. Facility personnel report material safety data sheets (SDS) are checked annually to verify no changes have occurred to the products formulation. In addition, the manufacturer will send an updated SDS in the event changes are made. The facility makes modifications to emission calculation spreadsheet values as needed, based on changes to material formulation values, to ensure emission calculations are accurate.

Paints and primers are mixed with solvents prior to coating application. All materials used in coating operations are tracked and taken into account for emission calculations. Primer to be used is mixed with solvent and stored in 10 gallons buckets. Hoses for the air assisted airless spray applicator are placed into the bucket. A Lid remains on the bucket covering up to the point of the hoses to minimize fugitive emissions, S.C. III. 3. Primer and solvent usage is tracked and recorded. An electronically controlled system mixes the paint and solvent applied in coating operations for each of the three paint booths. Each booth is equipped with an electronic meter that measures paint material usage. The meters are zeroed at the beginning of each paint application, by the painter. At the end of application, material usage is hand recorded. The handwritten records are transferred to a master spreadsheet daily. The data is entered into emission calculation spreadsheets monthly.

When paint lines are flushed, a system is in place to recapture solvents. Material from flushed paint lines is processed in a device that utilizes heat to separate solvents from unused paint material. The recovered solvent is pumped into a barrel to be reused in the coating booths. The paint material left over from the solvent recovery process is disposed of properly by Safety-Kleen, S.C. III. 1.

Emissions from FGCOATING are tracked based on material usage. As previously discussed, material usage is tracked for each paint booth and documented in a spread sheet. The same coating products are used in all three booths. The facility tracks weekly usage amounts for each product used in the FGCOATING operation. Based on each products VOC content and the amount of material used, the VOC emissions from each product are calculated. Calculated VOC emissions for each product are summated to get the total VOC emissions for each paint booth. Monthly and 12-month rolling time period records are maintained. Records were reviewed for the period of January 2019 to June 2021. Appropriate records appear to be in place.

During the period of records reviewed, the highest monthly emissions of VOCs for booth one occurred in September 2020 with 753.8 lb/month emitted. This is below the permitted monthly limit of 2,000 lb/month, S.C. I. 2. The lowest monthly emissions occurred in April 2020 with 297.6 lb/month emitted. For booth one, the highest calculated VOC emissions 12-month rolling time period occurred at the end of June 2021 with 3.7081 tons/12 months emitted, well below the permitted limit of 10.0 tpy, S.C. I. 1.

The highest monthly emissions of VOCs for booth two occurred in February 2021 with 954.8 lb/month emitted. This is below the permitted monthly limit of 2,000 lb/month, S.C. I. 2. The lowest monthly emissions occurred in April 2020 with 204.3 lb/month emitted. For booth two,

the highest calculated VOC emissions 12-month rolling time period occurred at the end of June 2021 with 4.9033 tons/12 months emitted, well below the permitted limit of 10.0 tpy, S.C. I. 1.

The highest monthly emissions of VOCs for booth three occurred in March 2021 with 1218.6 lb/month emitted. This is below the permitted monthly limit of 2,000 lb/month, S.C. I. 2. The lowest monthly emissions occurred in April 2020 with 350.9 lb/month emitted. For booth three, the highest calculated VOC emissions 12-month rolling time period occurred at the end of June 2021 with 5.7350 tons/12 months emitted, below the permitted limit of 10.0 tpy, S.C. I. 1.

FGMETALPARTS

Flexible Group Metal Parts encompasses all metal parts coating lines source-wide, including coating lines covered by other permits, which are exempted by R 336.1621(10)(b). The facility currently only consists of the three coating booths in FGCOATING. Appropriate records for FGMETALPARTS are maintained. VOC emissions for each individual coating booth are tracked and summated to get the total VOC emissions. During the period of records reviewed, the month with the highest total VOC emissions was December 2020 with 2720.9 lb/month. The lowest total monthly emissions was April 2020 with 852.7 lb/month. Records of the total VOC emissions per 12-month rolling time period are maintained, S.C. VI. 3. In the records reviewed, the highest 12-month period occurred at the end of June 2021 with 14.3464 tons/12 months, well below the permitted limit of 30.0 tpy, S.C. I. 1.

FGFACILITY

The conditions of FGFACILITY apply source-wide to all process equipment covered by other permits, grandfathered equipment, and exempt equipment. Onsite personnel reported that activities onsite utilizing hazardous air pollutant (HAP) containing materials are limited to processes carried out in the coating building. HAP emissions are tracked by tracking the amount of material used. Materials used are assessed for HAP content using manufacturer formulated data, S.C. V. 1. Material usage amounts are entered into a facility spreadsheet. Based on the amount of material used and HAP content of the material, HAP emissions are calculated and tracked. Usage and emissions are tracked for individual booths and the facility total. Monthly and 12-month rolling time period records are maintained for each individual HAP. Special condition I. 1. limits the usage of each individual HAP to less than 8.9 tpy based on a 12-month rolling time period. Records provided by the facility list 5 HAPs which include, cumene, ethylbenzene, methanol, naphthalene, and xylene. Records of HAP emissions were reviewed for the period of January 2019 to June 2021.

During the reviewed period of records, the month with the highest emissions of cumene was December 2020 with 8.32 lb/month. The month with the lowest emissions of cumene was April 2020 with 2.65 lb/month. The highest 12-month rolling time period emissions of cumene occurred at the end of June 2021 with 0.0435 tons/12 months, well below the permitted limit of 8.9 tpy, S.C. I. 1.

Emission records of ethylbenzene during the reviewed period show the month with the highest emissions was December 2020 with 32.68 lb/month emitted. The month with the lowest emissions of ethylbenzene was April 2020 with 10.34 lb/month. The highest 12-month rolling

time period emissions of ethylbenzene occurred at the end of June 2021 with 0.1710 tons/12 months, well below the permitted limit of 8.9 tpy, S.C. I. 1.

Methanol emission records during the reviewed period show the month with the highest emissions was September 2020 with 0.94 lb/month emitted. The highest 12-month rolling time period emissions of methanol occurred at the end of September 2020 with 0.0037 tons/12 months, well below the permitted limit of 8.9 tpy, S.C. I. 1. In the record period reviewed, September 2020 was the last month materials containing methanol were used.

Naphthalene was listed as a potential HAP emission in the records provided by the facility. During the period of records reviewed, no naphthalene was recorded to be emitted by the facility.

Emission records of xylene during the reviewed period show the month with the highest emissions was December 2020 with 138.20 lb/month emitted. The month with the lowest emissions of xylene was April 2020 with 43.66 lb/month. The highest 12-month rolling time period emissions of xylene occurred at the end of June 2021 with 0.7225 tons/12 months, well below the permitted limit of 8.9 tpy, S.C. I. 1.

Records are maintained for the total HAPs emitted by the facility for 12-month rolling time periods. During the period of records reviewed, the highest 12-month rolling time period of total HAP emissions occurred at the end of June 2021 with 0.9381 ton/ 12 months. The facility remained well below their permitted total HAPs emission limit of 22.5 tpy, S.C. I. 2.

Facility personnel report that if new products are added to facility processes, they will be assessed for potential emissions, including HAPs. Personnel said the purchasing department at Bandit Industries keeps track of any new products utilized. If new materials were to come in, individuals involved with emission tracking operations would review the materials, as well as have their consultant review the new materials. If products used were to be added, the facilities emission calculation spreadsheet would be updated with the new products and their properties. Currently the facility continues to use the same vendor and products.

Additional activities are conducted onsite including welding, grinding, shaping of metal, and repairing equipment. These activities appear to meet one or more of the AQD exemptions. An in-depth review of these activities was not conducted during this inspection. Focus during the inspection was placed on ensuring the facility was in compliance with the activities listed within PTI No. 397-93(B) and the facilities Administrative Consent Order (ACO), AQD No. 2020-17. Facility personnel report no sandblasting activities are conducted onsite. In addition, no stacks were observed onsite other than those associated with the processes conducted in the coating building.

Summary

Bandit Industries, SRN N5223, manufactures tree stump grinders, hand fed woodchippers, large scale horizontal grinders and whole tree chippers in Isabella County, MI. The facility is a synthetic minor source for HAPs and a minor source of VOCs. One active PTI is associated with the facility, PTI No. 397-93B. Facility coating activities are encompassed by PTI No. 397-93B and include three coating booths, surface prep operations and associated activities. The facility is currently subject to an Administrative Consent Order (ACO), AQD No. 2020-17. Materials to be coated at the

facility are first sprayed with a pre-treat solution. The purpose of the pre-treat solution is to clean and etch material. Once pretreatment application is completed, materials are transported to one of three onsite coating booths. An epoxy-based primer is applied using air-assisted airless applicators. After material is primed, a polyurethane based paint is applied with electrostatic applicators. Appropriate records appear to be maintained and were reviewed as part of the September 14, 2021 inspection. Based on the records reviewed and observed activities onsite, the facility appears to be operating in accordance with the requirements and limits of PTI No. 397-93B. At this time, the facility appears to be in compliance.

Nathanael Gentry

DATE 9/23/2021

SUPERVISOR Chris Hare

NAME