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

N261450013

FACILITY: NBHX Trim USA Corporation		**SRN / ID:** N2614
LOCATION: 1020 Seven Mile Road, COMSTOCK PARK		**DISTRICT:** Grand Rapids
CITY: COMSTOCK PARK		**COUNTY:** KENT
CONTACT: Dan Madden , Plant and Environmental Manager		**ACTIVITY DATE:** 08/22/2019
STAFF: Adam Shaffer	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled unannounced inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Adam Shaffer arrived at the NBHX Trim (NBHX) facility located in Grand Rapids, MI on August 22, 2019 at 10:44 am to complete a scheduled unannounced inspection. The weather conditions at the time of the inspection were partly cloudy skies, temperatures in the upper sixties' degrees Fahrenheit and winds from the northeast at 5-10mph. Prior to entering the facility, offsite odors and emission observations were completed. A mild wood smell was observed to the southwest of the facility. No additional odors were noted coming from the facility. Emissions observed appeared to be steam.

Facility Description

NBHX is a manufacturer of wood trim parts for the automotive industry. The facility is a major source of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) and is subject to the Title V program. The facility is in operation with Renewable Operating Permit (ROP) No. MI-ROP-N2614-2017 and Permit to Install (PTI) No. 73-14A.

Offsite Compliance Review

- **NBHX is required to submit semi-annual and annual compliance reports per Part A General Conditions 19-23 of MI-ROP-N2614-2017. Semi-annual and annual compliance reports were reviewed since the previous inspection on February 2, 2017. Several deviations were noted; however, each deviation had been adequately addressed with no violation notices issued.**
- **Based on the timing of the inspection, the 2018 Michigan Air Emissions Reporting System (MAERS) Report had been submitted and was reviewed prior to the August 22, 2019 inspection. The 2018 MAERS Report was received on March 5, 2019. Upon review, minor errors were noted in the report. After further review, the 2018 MAERS Report was determined to be acceptable.**

Compliance Evaluation

Upon arrival onsite, AQD staff AS met with Mr. Dan Madden, Plant Environmental Manager, who provided a tour of the facility, answered site specific questions and provided requested records. No equipment changes have occurred to the facility since the last inspection except for a new glue application operation that will be discussed further in this report. NBHX's ROP was renewed on October 10, 2017. Following this, an error was identified in a material limit associated with a second resin injection mold application of a topcoat for interior automotive parts (EUPUR2). In response to this, Permit to Install (PTI) No 73-14A was issued. Additional information regarding PTI No. 73-14A is discussed further below.

MI-ROP-N2614-2017

EUBLEACHBOOTH

This emission unit consists of a manual spray application of an aqueous solution of inorganic bleaching materials in a water wash spray booth and associated drying tunnel. EUBLEACHBOOTH is subject to an hourly hydrogen peroxide (CAS No. 7722-84 -1) emission limit of 1.3 pounds per hour (pph). Additionally, this emission unit is also subject to a 3.7 ton per year (tpy) limit of hydrogen peroxide per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. NBHX utilizes only one hydrogen peroxide containing material for this emission unit that is 30% hydrogen peroxide. For the month of July 2019, the emission rate based on monthly total hydrogen peroxide emissions and operating days was 0.15 pph which is within the permitted limit. For the month of July 2019, 29.6 lbs of hydrogen peroxide was emitted. As of July 2019, 0.29 tpy of hydrogen peroxide was emitted per a 12-month rolling time period and is well within the permitted limit. Previous pph and 12-month rolling time periods of hydrogen peroxide emissions were reviewed and appeared to be within the permitted limits.

EUBLEACHBOOTH was observed during the site inspection. A water curtain system was observed installed for this emission unit. EUBLEACHBOOTH utilizes high-volume low-pressure spray technology with test caps available for pressure testing. Per special conditions (SC).VI.3.a-e, NBHX shall keep usage rates of each hydrogen peroxide material used, reclaim of materials (if applicable), hydrogen peroxide contents of each material, and emissions per a monthly / 12-month rolling time period. Based on the records requested and reviewed, NBHX appears to be keeping track of applicable records.

Two stacks are associated with this emission unit and were observed during the inspection. The stacks were observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in the MI-ROP-N2614-2017.

EUBLEACHBOOTH is included in the Malfunction Abatement Plan (MAP) and Preventative Maintenance Plan (PMP). The most recent MAP/PMP is dated December 2011 and a copy was received with the previous ROP renewal application. Applicable records were requested for select time periods. After further review, NBHX appears to overall be following the MAP/PMP in place.

EUSTAIN

This emission unit consists of a spray application of wood stain in three spray booths and associated drying room. EUSTAIN is subject to a combined VOC and acetone emission limit of 13.7 tpy per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, 86.5 pounds (approximately 0.04 tons) of combined VOC and acetone emissions were emitted. As of July 2019, 0.61 tpy were emitted of the combined VOC and acetone emissions which is within the permitted limit. Previous 12-month rolling time periods were reviewed and appeared to be within the permitted limit.

This emission unit was observed during the site inspection. A water curtain system was observed installed for this emission unit. EUSTAIN utilizes high-volume low-pressure spray technology with test caps available for pressure testing. Waste and coating materials for EUSTAIN appeared to be captured, stored and/or disposed of

properly. Per SC.V.1, NBHX shall determine the VOC content for each stain utilizing Test Method 24 or upon request utilize manufacturer's formulation data. At the time of the inspection, NBHX had completed Method 24 testing for several of the coatings used and appeared to be using the results when determining VOC emissions. NBHX had historically requested to utilize manufacturer's formulation data. However, due to difficulties in getting manufacturer's formulation data from an oversees supplier, NBHX instead utilizes worst-case scenarios from Material Safety Data Sheets (MSDS) to calculate emissions. For the remaining coating materials used in EUSTAIN that did not have Method 24 testing completed, NBHX appears to use worst case scenarios from MSDS to determine emissions. After further review this was concluded to be acceptable at this time.

Per SC.VI.3.a-d, NBHX shall keep track of usage rates for each stain, purge and clean-up material used, VOC and acetone contents, and VOC and acetone emissions per a monthly / 12-month rolling time period. Minor errors were identified. Based on the records reviewed, NBHX appears to be keeping track of applicable records.

Three stacks are associated with this emission unit and were observed during the inspection. The stacks were observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in the MI-ROP-N2614-2017.

EUSTAIN is included in the MAP/PMP. As stated earlier the most recent MAP/PMP is dated December 2011 and a copy was provided with the previous ROP renewal application. Applicable records were requested for select time periods. After further review, NBHX appears to be following the MAP/PMP in place.

EUMODELSHOP

This emission unit consists of a manual bench-top spray booth used for touch-ups to wooden interior automotive parts. EUMODELSHOP is subject to an acetone emission limit of 4.0 tpy per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. After reviewing the records provided there appear to be no acetone emissions from the materials used at EUMODELSHOP.

EUMODELSHOP is also subject to an hourly styrene (CAS No. 100-42-5) emission limit of 0.73 pph. However, during the inspection Mr. Madden stated that no styrene containing materials are used here, therefore, no records were requested. Additionally, this emission unit is subject to a styrene content limit for all coating used. Since no styrene containing materials are used in this area, no records were requested with regards to this material limit.

EUMODELSHOP is subject to a coating material limit of 4,380 gallons per year per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, 57.3 gallons of coating materials were used. As of July 2019, the 12-month rolling total was 177 gallons which is well within the permitted limit. Previous 12-month rolling time periods were reviewed and appeared to be within the permitted limit.

This emission unit was observed during the site inspection. Based on observations made, waste containers of waste coatings / cleanup solvents appeared to be kept properly closed and stored. Additionally, NBHX shall limit open containers when not in use in order to limit the amount of fugitive emissions. This appears to be being

completed based on observations made. EUMODELSHOP utilizes dry filters to limit emissions from this spray booth. AQD staff AS recommended to NBHX staff to limit the air gaps around the filters when the booth was in operation in order to adequately control emissions. Spent filters appear to be adequately disposed of. Based on the observations made, the spray booth appeared to be operating satisfactorily. The booth utilizes high-volume low-pressure spray technology with test caps available for pressure testing.

Per SC.VI.3.a-d, NBHX shall keep track of usage rates of acetone containing materials, acetone contents for materials used, and acetone emissions per a monthly / 12-month rolling time period. Based on the records requested and reviewed, NBHX appears to be keeping track of applicable records.

Per SC.VI.4.a-c, NBHX shall keep track of usage rates of coating materials and reclaimed (if applicable), and total usage rates per a monthly / 12-month rolling time period. No reclaim of materials is completed for EUMODELSHOP. It was determined that NBHX appears to be keeping track of applicable records.

One stack is associated with this emission unit and was observed during the inspection. The stack was observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in the MI-ROP-N2614-2017.

EUPUR / EUPUR2

These two emission units are for the resin injection mold applications of a topcoat for wooden interior automotive parts. As stated earlier in this report, following the approval of ROP No. MI-ROP-N2614-2017, an error was identified in the mold release material limit for EUPUR2. The mold release material limit was listed as 0.4 lb VOC/gal (minus water) as applied. This value was determined to have been incorrect. On August 10, 2018, PTI No. 73-14A was approved for EUPUR2 with the corrected mold release material limit of 5.07 lb VOC/gal (minus water) as applied. At the time of the inspection, however, an M-001 form had not been submitted to the AQD to roll the PTI into the ROP. This was discussed with staff following the inspection and an M-001 form shall be submitted by NBHX to incorporate PTI No. 73-14A into MI-ROP-N2614-2017. Conditions for EUPUR2 are similar in PTI No. 73-14A and MI-ROP-N2614-2017. The records provided from Mr. Madden show that EUPUR and EUPUR2 were combined. EUPUR and EUPUR2 are both subject to the VOC emission limit of 11.7 tpy and 12.7 tpy respectively per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. Based on the records reviewed, NBHX is using the stricter limit of 11.7 tpy for both emission units combined. For the month of July 2019, 127.4 lbs of VOCs were emitted. As of July 2019, 0.54 tpy of VOCs were emitted per a 12-month rolling time period which is well within the permitted limit. Previous 12-month rolling time periods were reviewed and appear to be within the permitted limits.

Both EUPUR and EUPUR2 are subject to a material limit of 10 percent VOC as received for the non-reactive portion of the lacquer resin. Additionally, both emission units are subject to a VOC material limit for the mold release material of 6.1 lb VOC/gal minus water as applied and 5.07 lb VOC/gal minus water as applied for EUPUR and EUPUR2 respectively. Since emissions are combined in the records provided, the more stringent value will be used to verify compliance for both emission units. Records were requested and reviewed from July 2018 through July 2019. Upon initial review, the VOC

content of the non-reactive portion of the lacquer resin was 13.7 percent which is over the permitted limit of 10 percent by weight. This was brought to the attention of NBHX staff and their respective consultant. After further review this was determined to have been an error from the Test Method 24 results completed in February 2019 (water was not separated from the volatiles). A sample was submitted for Method 24 testing and the results showed the VOC content of the non-reactive portion of the lacquer resin to be 7.19 percent which is within the permitted limit. Records for the VOC content of the mold release show a 3.3 % by weight VOC content. Calculated out, the VOC content of the mold release coating appears to be approximately 0.28 lbs/gal (minus water) as applied which is within the permitted limit of 5.07 lbs/gal minus water. Method 24 test results were also provided verifying this.

Both emission units were observed during the site inspection. AQD staff AS advised NBHX staff on limiting open containers when not in use in order to limit fugitive emissions. Overall, NBHX appeared to be keeping coatings, waste containers of waste coatings, curing agents, mold release materials and cleanup solvents properly closed and stored.

Per SC.V.1 the VOC content for all coatings, curing agents, mold release materials and cleanup solvents shall be determined by Test Method 24. Alternatively, and upon written approval by the AQD District Supervisor, NBHX may utilize manufacturer's formulation data. Additionally, random Method 24 testing shall be completed yearly with all coatings tested in a five-year period. At the time of the inspection, Method 24 testing had been completed for the materials used in EUPUR/EUPUR2.

Per SC.VI.3.a-d, NBHX shall keep monthly records for EUPUR and EUPUR2 of usage rates of each lacquer resin, mold release and cleanup solvent, VOC content, and VOC emissions per a monthly / 12-month rolling time period. Based on the records requested and reviewed, NBHX appears to be keeping track of applicable records for EUPUR / EUPUR2.

One stack is associated with EUPUR and EUPUR2 respectively and were observed during the inspection. The stacks were observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in the MI-ROP-N2614-2017.

EUBOILER-A

This emission unit is for the natural gas boiler with a rated capacity of 10.5 MMBTU/hr installed in 1990. EUBOILER-A is subject to a VOC limit of 0.06 pounds per hour (pph) per a 24-hour rolling time period and a second VOC limit of 0.26 tpy per a 12-month rolling time period. Records were requested and reviewed from July 2018 through July 2019. Upon review, it appears that NBHX is combining natural gas usage for both boilers when calculating VOC emissions. For the month of July 2019, the highest calculated VOC emission rate was 0.012 lbs/hr which is within the permitted limit. For the month of July 2019, 4.9 lbs of VOCs were emitted. As of July 2019, 160.6 lbs of VOC emissions were emitted per a 12-month rolling time period which is within the permitted limit. Previous hourly and 12-month rolling time periods were reviewed and appear to be within the permitted limits.

During the inspection EUBOILER-A was observed. It was verified by NBHX staff that the boiler only uses natural gas. Per SC.VI.2.a-b, NBHX shall keep records of the VOC

calculations used to determine the pounds per hour emission rate and the total VOC emissions per a 12-month rolling time period. Based on the records provided, it appears that NBHX is keeping track of all applicable records.

One stack is associated with this emission unit and was observed during the inspection. The stack was observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in MI-ROP-N2614-2017.

EUBOILER-A is subject to the New Source Performance Standards (NSPS) Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Based on records provided, NBHX is keeping track of their daily natural gas usages. An initial notification for EUBOILER-A appears to have been historically submitted though a copy could not be found. This was discussed with the company and an initial notification for EUBOILER-A shall be submitted.

EUBOILER-C

This emission unit is for a natural gas boiler with a rated capacity of 12.0 MMBTU/hr installed in 2015. EUBOILER-C was observed during the inspection and was verified by NBHX staff to utilize only natural gas. EUBOILER-C is subject to the NSPS Subpart Dc regulations. An initial notification for EUBOILER-C was submitted on March 6, 2017. Based on the records reviewed, NBHX is keeping track of natural gas usages. NBHX appears to be in compliance with NSPS Subpart Dc rules.

FGBOILERMACTA

NBHX is a major source of HAPs and is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters. This section is specifically for EUBOILER-A. As stated previously the boiler only utilizes natural gas. An Initial Notification Report was submitted for this boiler in 2005. An Energy Assessment for this boiler was completed on July 19, 2017. Based on the size of the boiler, it is required to have annual tune ups with reports submitted to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) and to the AQD. Since the last inspection, a tune up was completed on June 20, 2017 for 2017 and the report was submitted to the EPA on March 13, 2018. The report was later submitted to the AQD on May 10, 2018. Since then an additional tune up has been completed on May 8, 2019. Speaking with NBHX staff it appeared the boiler was not in operation for most of the 2018 year and was fixed at the end of the 2018 year. The 2019 report had not been submitted as required to the AQD or EPA, however, a copy of the report was available and provided upon request. Errors were noted in the report and after discussing this with NBHX staff, a complete report for May 8, 2019 will be submitted to the AQD with the appropriate ROP report certification form. Additionally, following the inspection, NBHX staff stated that they had submitted the 2019 tune up report for EUBOILER-A through CEDRI to the EPA.

FGBOILERMACTC

NBHX is a major source of HAPs and is subject to the NESHAP Subpart DDDDD. This section is specifically for EUBOILER-C. As stated previously, this boiler only utilizes natural gas. Based on the size of the boiler, it is required to have annual tune ups with reports submitted to the EPA via CEDRI and to the AQD. Since the last inspection, a tune up was completed on June 20, 2017 for 2017 and the report was submitted to the

EPA on March 13, 2018. The report was later submitted to the AQD on May 10, 2018. Since then additional tune ups have been completed on August 1, 2018 and May 8, 2019. The reports had not been submitted as required to the AQD or EPA, however, copies of the reports were available and provided upon request. Errors were noted and after discussing this with NBHX staff, complete reports for August 1, 2018 and May 8, 2019 will be submitted to the AQD with the appropriate ROP report certification form. Additionally, following the inspection, NBHX staff stated that they had submitted the 2018 and 2019 tune up reports for EUBOILER-C through CEDRI to the EPA. Upon review, an Initial Notification Report for this boiler appears to not have been submitted to the AQD. This was discussed with NBHX staff and will be submitted.

FGRTO

This flexible group is for the spray application of a polyurethane sealer/isolator or polyester coatings in a water wash enclosure controlled by a regenerative thermal oxidizer (RTO) with associated uncontrolled flash-off areas, flash-off tunnels, drying areas, and racking/staging areas that is subject to Compliance Assurance Monitoring (CAM) rules. Emission units included in this flexible group are EUPOLYU, EUPOLYESTER-A, and EUPOLYESTER-B.

This flexible group is subject to a VOC emission limit of 48.36 tpy per a 12-month rolling time period. This flexible group is also subject to a styrene hourly emission limit of 11.00 pph. Records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, 977.2 lbs of VOCs were emitted. As of July 2019, 10,244 lbs (approximately 5.12 tons) of VOCs were emitted per a 12-month rolling time period which is within the permitted limit. For the month of July 2019, the styrene emission rate was 0.06 lbs/hr which is well within the permitted limit. Previous hourly and 12-month rolling time periods were reviewed and also appear to be within the applicable limits.

This flexible group was observed during the inspection. A water wash system was observed in place. Purge waste coatings and solvents appeared to be satisfactorily closed and stored. The spray booths for FGRTO utilize high-volume low-pressure spray applicators. Test caps are available for pressure testing. The RTO was in operation at the time of the inspection and was observed operating at 1,510°F, which is above the minimum permitted limit of 1,450°F. The capture system was observed in operation with a static pressure of 0.7-0.9" of water column. NBHX is recording the static pressure on the opposite side of the fan that pulls emissions into the capture system so a positive reading will indicate satisfactory operation of the capture system. The most recent RTO destruction efficiency test was on May 24-25, 2016. During testing the RTO destruction efficiency was determined to be 98.05% and the capture efficiency of the capture system was 92.39%. Per SC.V.1, NBHX has five years upon the issuance of MI-ROP-N2614-2017 to complete stack testing to verify the capture and destruction efficiency of the RTO. ADQ staff AS and NBHX staff discussed this and it was advised to complete the testing sooner rather than waiting until the deadline in case potential issues arise.

Per SC.V.5, VOC content for all coatings used in this flexible group shall be determined by Test Method 24. Alternatively, and upon written approval by the AQD District Supervisor, NBHX can instead request to utilize manufacturer's formulation data. NBHX had previously requested to utilize manufacturer's formulation data to determine the VOC contents of materials used. However, due to difficulties in getting

manufacturer's formulation data from an oversees supplier, NBHX instead utilizes worst-case scenarios from MSDS to calculate emissions. At the time of the inspection, Method 24 testing had been completed for some of the older materials used and MSDS appeared to be used for the remaining materials not Method 24 tested in calculating VOC emissions. When comparing the results from the Method 24 testing and MSDS to emissions calculated several errors were noted in the records. These were brought to the attention of NBHX staff and responses for each potential issue were received. Minor errors were still noted but overall the VOC contents noted in select materials were concluded to be acceptable. After further discussion, the use of worst-case scenarios from MSDS to calculate VOC emissions was determined to be acceptable at this time.

At the time of the inspection temperature records were observed being recorded via a circular chart and an LCD monitor for the temperature of the combustion chamber and static pressure of the capture system was observed. NBHX is required to continuously keep temperature records of the RTO combustion chamber in order to demonstrate compliance. Temperature records for the RTO combustion chamber were requested and reviewed for select months. During the inspection NBHX staff had indicated in 2018 they were having trouble in keeping the RTO temperature from rising too high. The issue had since then been corrected. Several potential instances of concern where temperature charts indicated the temperature was below the required reportable excursion limit of 1475°F and/or minimum operating temperature of 1450°F were brought to the attention of NBHX staff. These areas were looked further into and verified by NBHX staff that no concerns with the RTO occurred during those time periods and coating operations did not occur when the RTO was not at minimum temperature. After further review, it appears that the RTO was operating properly.

Per SC.VI.3 NBHX shall once on a daily basis record the temperature of the LCD temperature monitor and compare it to the recorded temperature on the chart recorder. Daily records were requested for select months and reviewed. Based on the records reviewed, NBHHX is recording daily records of the RTO temperature. Per SC.VI.4-7, NBHX is subject to various inspection requirements in order to maintain compliance of the RTO. Records were requested for select time periods and provided. Based on the records reviewed, it appears that overall, NBHX is completing appropriate inspections of the RTO.

An LCD monitor displaying the capture system static pressure was noted during the inspection. Per SC.VI.9, NBHX shall record the static pressure for the capture system on a once per shift basis or more frequently. Daily records were requested for select time periods and reviewed. Based on the records reviewed, it appears that NBHX is adequately keeping track of the daily static pressure drops for the capture system. Per SC.VI.10-14, NBHX is subject to various inspection requirements in order to maintain compliance of the capture system. Inspection records were requested for select time periods and provided. Based on the records reviewed, NBHX appeared to overall be completing the appropriate inspections of the capture system.

Based on the records reviewed, NBHX appears to be keeping track of usages, appropriate material contents, hourly styrene emission rates and monthly/12-month rolling time period VOC and acetone emissions. It was noted that this is the only area that reclaim of materials is completed.

Nine stacks are associated with FGRTO and the rooftop was accessed during the inspection. The exact number and locations of each stack could not be identified, and it was verified following the inspection by NBHX staff that several stacks have been removed and they only appear to be in operation with four of the nine stacks. Moving forward, it will be discussed with NBHX staff on updating MI-ROP-N2614-2017 to accurately reflect the current stacks and appropriate dimensions.

The RTO is included in the MAP/PMP and includes various items in daily, weekly, monthly quarterly and annual inspections. As stated previously, inspection records for the RTO and capture system were requested for select time periods and provided. Based on the records reviewed, it appears that NBHX is overall following the MAP/PMP for the RTO and capture system. However, minor errors were noted, and it was concluded that an updated MAP/PMP will be requested to better reflect current operations and procedures in place. This was discussed with NBHX staff following the inspection.

FGDUST

This flexible group is for the six dust collectors which serve various wood working operations within the facility. The dust collectors are split into two separate groups (EUWESTDUSTSYSTEM & EUEASTDUSTSYSTEM) with three dust collectors for each group. FGDUST is also subject to CAM and is discussed further below. FGDUST is subject to several particulate matter (PM) emission limits that are as follows:

Pollutant	Limit	Time Period/Operating Scenario	Equipment
PM	0.01 lbs/1000 lbs of exhaust gases	Instantaneous	Each duct collector
PM10	1.37 pounds per hour	Hourly	Dust collector 6
PM10	2.57 pounds per hour	Hourly	Dust collector 5
PM10	2.83 pounds per hour	Hourly	Dust collectors 2 and 3 individually
PM10	1.68 pounds per hour	Hourly	Dust collectors 1 and 4 individually

Magnehelic gauges were observed for five of the six dust collectors. During the previous inspection it was stated by NBHX staff that dust collector 6E has not been in operation since at least July 1999 and it was concluded to still not be in operation during the inspection. Additionally, this unit does not have a magnehelic gauge. Listed below are the magnehelic readings that were observed during the inspection and setpoint ranges.

Dust Collector #	NBHX ID #	Magnehelic Reading	Set Point (If observed)
Dust Collector # 1	1W	2.4"	No range indicated
Dust Collector # 2	2W	1.6"	0" – 3.3"
Dust Collector # 3	3W	1.8"	0" – 4"

Dust Collector # 4	4E	1.1"	No range indicated
Dust Collector # 5	5E	0.95"	No range indicated

The low magnehelic reading for 5E was discussed with NBHX staff and it was determined that this unit recently had bags replaced and was concluded to be acceptable. No excess PM was observed around each of the dust collectors and no emissions were observed prior to arriving onsite for the inspection. Daily pressure drops and opacity observation records were requested and provided by NBHX staff for select time periods. Upon review of the records provided, errors were noted when filling out the emission observation records. This was discussed with NBHX staff and moving forward records will be filled out more adequately. Per MI-ROP-N2614-2017, the indicator range for the pressure drop readings indicating satisfactory operation is 1" – 5" of water column (w.c.). No daily pressure drop readings were noted exceeding 5" which would be considered an excursion; however, various days were observed where the pressure drop readings were below 1" of w.c., especially for dust collector id # 3-W. Per the CAM plan for FGDUST, if the pressure drop readings are below 1" w.c. an inspection is completed. While discussing the records with NBHX staff it was determined that if the pressure drop readings would consistently be below 1" w.c. then it would be looked further into. Dust collector id # 3-W was investigated further regarding the consistently low pressure drop readings and it was concluded that during the winter, ice had fallen and hit the air pressure line for the magnehelic and was the reason the gauge was off. The line was eventually fixed, and emission observations verified that the baghouse appeared to be operating satisfactorily at that time. NBHX staff stated that pressure gauges that measure the static pressure drop are calibrated annually. Based on the records reviewed, the five baghouses appear to be operating satisfactorily. Based on the records reviewed, NBHX appears to be adequately following the CAM plan.

Six stacks are associated with FGDUST and were observed during the inspection. The stacks were observed venting unobstructed vertically and though the exact dimensions were not measured, they appeared to be consistent with the listed values in the MI-ROP-N2614-2017.

FGDUST is included in the MAP/PMP and weekly inspections for various items are to be completed. Records were requested for select time periods and provided. Based on the records reviewed, it appears that NBHX is adequately following the MAP/PMP for FGDUST.

FGRULE287(2)(c)

Glue Membrane Booth - One glue membrane booth was observed and was installed since the previous inspection. In this booth glue is sprayed onto wood parts before applying a veneer to seal the parts together. The booth was not in operation at the time of the inspection. AQD staff AS advised NBHX staff to limit the air gaps when in operation in order to adequately capture particulate emissions. The dry filters in place appeared to be in good condition. Monthly records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, the glue membrane booth used 26 gallons which is well within the limit of 200 gallons per month. Previous monthly total usages were also less than 200 gallons. Based on the records reviewed and observations made, this booth appears to be exempt per Rule 287(2)(c).

EUEDGEPAINT – NBHX has one edge panting booth that were observed during the inspection. Additionally, plant-wide wipe solvent usage (IPA & MIBK) is included in these records. AQD staff AS advised NBHX staff to limit the air gaps when in operation in order to adequately capture particulate emissions. The dry filters in place appeared to be in good condition. Monthly records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, both booths used 18 gallons which is well within the limit of 200 gallons per month. Previous monthly total usages, though combined, were still less than 200 gallons. Based on the records reviewed and observations made, this booth appears to be exempt per Rule 287(2)(c).

EUAIRBRUSH – NBHX utilizes two air brush booths that were observed during the inspection. AQD staff AS advised NBHX staff to limit the air gaps when in operation in order to adequately capture particulate emissions. The dry filters in place appeared to be in good condition. Monthly records were requested and reviewed from July 2018 through July 2019. For the month of July 2019, both booths used 57 gallons which is well within the limit of 200 gallons per month. Previous monthly total usages, though combined, were still less than 200 gallons. Based on the records reviewed and observations made, these booths appear to be exempt per Rule 287(2)(c).

FGRULE290

The open pore process area utilizes the Rule 290 exemption. A water wash system was observed in place for this part of the process. No open containers not in use were observed for this emission unit. Records were requested from July 2018 through July 2019 and reviewed. For the month of July 2019, emissions from the open pore process were 202.8 lbs of controlled non-carcinogenic VOC emissions and 1.2 lbs of controlled carcinogenic VOC emissions. These emissions appear to be within the Rule 290 limits. The carcinogenic emissions are only from ethylbenzene identified in a sealer material. Previous months reviewed also appear to show emissions within the required Rule 290 limits. Based on this, it appears the open pore process area is exempt per Rule 290.

FGCOLDCLEANERS

One parts washer was observed during the inspection. The parts washer was empty, labeled and closed at the time of the inspection. Based on the observations made the parts washer appears to be exempt per Rule 281(2)(h).

Additional Observations

- During the inspection twelve vertical presses were observed that when in operation a glue film is heated and pressed in between various veneer shaped materials. During this process, Mr. Madden stated that no emissions are created. Based on this, there is no potential to emit air emissions.
- The rooftop of the building was accessed during the site inspection.

Conclusion

Based on the facility walkthrough, observations made, and records reviewed, NBHX appears to be in compliance with MI-ROP-N2614-2017, PTI No. 73-14A and applicable air quality rules.

NAME adam J. [illegible] DATE 9/27/19 SUPERVISOR [illegible]