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

N716436565

FACILITY: MPW Container Management Corp.		**SRN / ID:** N7164
LOCATION: 50321 E Russell Schmidt, CHESTERFIELD		**DISTRICT:** Southeast Michigan
CITY: CHESTERFIELD		**COUNTY:** MACOMB
CONTACT: Gary Hood , Maintenance Manager		**ACTIVITY DATE:** 08/02/2016
STAFF: Kerry Kelly	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: FCE: It appears, based on the information gathered during the inspection, MPW is in violation of Special Condition 5.1 of PTI 79-03A for exceeding the three tote per hour production limit for FGOFFLINE on three separate occasions between January 2014 and June 2016. Non-compliance with Special Condition 5.1 in PTI 79-03A is also considered a violation of paragraph 10. A. of Consent Order 16-2004. A violation notice will be issued.		
RESOLVED COMPLAINTS:		

On August 2, 2016, I (Kerry Kelly) conducted a scheduled inspection of MPW Container Management Corp. located at 50321 Russell Schmidt Drive, Chesterfield, Michigan. This facility is identified by the State of Michigan with the State Registration Number (SRN) N7164 . The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; Permit to Install (PTI) No. 79-03A; and Consent Order 16-2004.

DESCRIPTION OF LOCATION, FACILITY, PERMITS, AND CONSENT ORDER

MPW Container Management Corp. operates a paint tote cleaning facility in Macomb County. The surrounding area is densely populated with residential and industrial properties. The nearest residential areas are less than a tenth of a mile west of MPW Container Management Corp.

A permit (PTI 79-03A) was issued on April 18, 2005 for a paint tote cleaning line, a manual paint tote cleaning station, a valve wash cabinet, and an impeller wash cabinet at MPW Container Management Corp. PTI 79-03A indicates the tote cleaning line consists of a disassembly station, a heel removal station using a vacuum system, three rinse stations (first, second and third) using rotating spray heads with sealing lids, and an exterior cleaning station done by hand. Water, Aqualene 7950, potassium hydroxide are used in the first rinse, deionized water is used in the second rinse, and butyl cellosolve is used in the final rinse. Activities completed at the manual station are the same as the line cleaning with the exception that the heel waste is gravity drained instead of vacuumed. The valves and impellers that were removed are cleaned in an enclosed Niagara wash cabinet or the enclosed "coffin" wash cabinet, and by hand in a sink using water. Aqualene is used in the Niagara wash cabinet and butyl cellosolve is used in the "coffin". PTI 79-03A also includes a facility-wide VOC and hazardous air pollutant (HAP) limit below major source threshold for all process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment (FGFACILITY). The facility is classified as a synthetic minor opt-out for VOC's and HAPs as a result.

The compliance plan set forth in Consent Order 16-2004 mandates MPW Container Management Corp. comply with PTI 79-03 specifically the material usage limits, monitoring requirements, recordkeeping/reporting/notification, process/operational limits, and emission limits. The consent order compliance plan also mandates MPW Container Management submit an initial application for a Renewable Operating Permit (ROP) and subsequent renewals. The AQD received a complete initial ROP application from MPW on October 14, 2004. The draft ROP went to the company for comment on January 13, 2005. On November 29, 2004 the USEPA delisted Ethlylene Glycol Mononbutyl Ether (butyl cellosolve). The delisting of butyl cellosolve resulted in MPW's potential to emit for hazardous air pollutants falling below the major source threshold. The AQD voided the ROP application on September 20, 2005 as a result of the reduction in potential to emit to below major source thresholds and the issuance of synthetic minor opt out permit PTI 79-03. Compliance with the consent order will be determined by compliance with PTI 79-03A.

INSPECTION

I (Kerry Kelly) arrived at MPW Container Management Corp. at approximately 2:30 PM on August 2, 2016, entered the office, showed my DEQ photo credentials, explained the purpose of the inspection, and gave a copy of the pamphlet "Environmental Inspections: Rights and Responsibilities to Mr. Gary Hood, Supervisor and Ms. Valerie Lassing, Operations Manager.

OPENING MEETING

In the opening meeting I asked Mr. Hood basic questions about MPW operations and about the general conditions, emission limits, and recordkeeping requirements set forth in PTI 79-03A. Mr. Hood stated there were no abnormal conditions, start-ups, shutdowns, or malfunctions that resulted in emissions of hazardous or toxic air pollutants. The equipment, according to Mr. Hood, has not been reconstructed, relocated, or modified. During the opening meeting Mr. Hood provided the following records with respect to compliance with opt-out permit 79-03A:

EULINEHEELING

Recordkeeping requirements for EULINEHEELING are focused on heel waste throughput. Heel waste is the residual paint that is in the totes when they arrive at MPW. In the line heeling process the heel waste is removed using a vacuum system. Heel waste throughput calculations are based on the total amount of waste generated in the tote cleaning process. The waste generated in the process includes heel, water, Aqualene 7950, potassium hydroxide, and butyl cellosolve. The heel waste calculations involve subtracting the solids left in the bottoms of the totes after the first rinse and the virgin cellosolve from the total waste generated. Though the permit requires MPW monitor and record the amount of heel waste collected, it is not possible to collect just heel waste. According to Mr. Tysar there is

residual heel waste left in the container after it has been vacuumed and this heel waste will be combined with the rinse products Aqualene 7950, potassium hydroxide, and butyl cellosolve. That is why the wastes are combined.

Special Condition 1.1 specifies that MPW shall not process more than 200,000 gallons of heel waste per 12-month rolling time period as determined at the conclusion of each month. From May 2013 through June 2016, the highest 12-month rolling time period of heel waste processed was 106,149 gallons. Negative monthly throughput values were reported for April 2011, January 2014, February 2014, 2014, August 2014, August 2015, and September 2015. MPW's consultant Mr. Randy Tysar, BT Environmental Consulting, Inc. (BTEC), suggested the reason for the negative throughput were erroneous values were reported for any of the following; waste tank beginning and ending inventory, waste transferred to the waste hauler, or total process tank bottoms. Mr. Tysar submitted calculations showing that the 12-month rolling total waste generated, including heel, water, Aqualene 7950, potassium hydroxide, and butyl cellosolve, would be below the 200,000 gallon heel waste limit. The highest 12-month rolling total waste reported for EULINEHEELING between January 2011 and December 2016 was 159,012 gallons reported in February 2013. Since the total waste generated is less than the limit in SC1.1, MPW will be considered to be in compliance with SC 1.1. Mr. Tysar created new monthly and 12-month rolling heel waste calculations based on the amount of heel waste collected per tote. The per tote heel waste calculations were generated using the initial heel waste calculations for January 2011 through December 2016 and the total amount of totes processed in the same time period. The new per tote calculation will ensure that there will no negative heel waste throughput reported in the future. The highest heel waste throughput between January 2014 through June 2016 using the new calculations (1.97 gallons per tote processed) was 56,174 gallons reported in January 2014 (attachment 1).

SC 1.2 and SC 1.3 requires the permittee monitor and keep records of the gallons of heel waste collected on a monthly and 12-month rolling time period. Mr. Hood provided records of the monthly and 12-month rolling heel waste throughput for January 2013 through June 2016. Mr. Tysar submitted updated reports using a per tote heel waste throughput on September 15, 2016 (attachment 1).

EUEXTERIOR

SC 2.1 sets a 9,000 gallon limit on the amount of exterior solvent which can be used per 12-month rolling time period. EUEXTERIOR SC 2.2 and 2.3 require the MPW monitor and keep records of the number of gallons of exterior solvent used per 12-month rolling time period. Mr. Hood provided records of the of the 12-month rolling exterior solvent throughput for January 2014 through June 2016 (attachment 2). The highest reported 12-

month rolling exterior solvent usage during this time period was 4,520 gallons reported for July 2015. It appears MPW is in compliance with the requirements in EUEXTERIOR SC 2.1, 2.2, and 2.3.

FGSOLVENTRINSE

SC 3.1: This condition sets a 50,000 gallon per 12-month rolling time period usage limit on the amount of butyl cellosolve which can be used at the facility. FGSOLVENTRINSE SC 3.3 and 3.4 require the company to monitor and keep records of the number of gallons of butyl cellosolve used per 12-month rolling time period. During the opening meeting Mr. Hood provided monthly and 12-month rolling butyl cellosolve solvent usage for FGSOLVENTRINSE for January 2014 through June 2016 (attachment 3). The highest reported butyl cellosolve 12-month rolling usage was 14,675 gallons reported in June 2016. The records provided by Mr. Hood appear to demonstrate compliance with FGSOLVENTRINSE SC 3.1, 3.3, and 3.4. FGSOLVENTRINSE SC 3.2 requires that butyl cellosolve be stored in closed containers. According to Mr. Hood wash solvent is stored in sealed stainless steel totes in the dirty bin warehouse. The containers I observed during the inspection were closed. It appears MPW is in compliance with FGSOLVENTRINSE SC 3.2.

FGPROCESSLINE

SC 4.1: This condition sets a 25 tote per hour and 60,000 tote per 12-month rolling time period limit on the amount of totes processed at the facility. FGPROCESSLINE SC 4.2 and 4.4 mandate the permittee monitor and keep records of the daily, monthly, and per 12-month rolling time period number of totes processed. FGPROCESSLINE SC 4.3 requires that the operating hours and hourly average process rate for FGPROCESSLINE be monitored on a daily basis. During the inspection Mr. Hood sent records of the amount of totes cleaned daily, monthly, and per 12-month rolling time period and the operating hours and hourly average tote process rate for FGPROCESSLINE for May 2004 through June 2016 (attachment 4). The highest reported daily average of totes processed between January 1, 2014 and June 30, 2016 was 19 totes. The highest reported number of totes processed in a month between January 1, 2014 and June 30, 2016 was 2707 totes. The highest 12-month rolling number of totes processed reported between January 1, 2014 and June 30, 2016 was 28,509 totes. Based on these records it appears MPW is in compliance with FGPROCESSLINE SC 4.1, 4.2, 4.3, and 4.4

FGOFFLINE

SC 5.1: This condition sets a 3 tote per hour and 4,000 tote per 12-month rolling time period limit on the amount of totes which can be cleaned via FGOFFLINE. FGOFFLINE SC 5.2 and 5.4 require the permittee monitor and

keep records of the daily, monthly, and per 12-month rolling time period number of totes processed through FGOFFLINE. FGOFFLINE SC 3.3 requires that the operating hours and hourly average process rate for FGOFFLINE be monitored on a daily basis. During the inspection Mr. Hood sent records of the amount of totes cleaned daily, monthly, and per 12-month rolling time period and the operating hours and hourly average tote process rate for FGOFFLINE for May 2004 through June 2016 (attachment 5). The highest reported daily average of totes processed between January 1, 2014 and June 30, 2016 reported was 4 totes on three separate occasions. The highest reported number of totes processed in a month between January 1, 2014 and June 30, 2016 was 216 totes. The highest 12-month rolling number of totes processed reported between January 1, 2014 and June 30, 2016 was 2,020 totes. Based on these records it appears MPW is in compliance with FGOFFLINE SC 5.2, 5.3, and 5.4 and in violation of FGOFFLINE SC 5.1.

FGFACILITY
SC 6.1a: This condition sets a VOC emission limit of 70 tons per 12-month rolling time period. Mr. Hood provided VOC emission records for each emission unit and flexible group and for FGFACILITY. The FGFACILITY emission records show negative VOC emissions for EULINEHEELING and FGSOLVENTRINSE indicating a problem with the calculations. I discovered a miscalculation of the total amount of Midas Strip 4510 and butyl acetate used each month. Mr. Tysar corrected the error and sent an updated spreadsheet via email (attachment 6). The updated VOC calculations show the highest 12-month rolling VOC emissions between January 2014 and June 2016 were 21.35 reported in April 2014. These records demonstrate MPW is in compliance with FGFACILITY SC 6.1a.

SC 6.1b and 6.1c sets an individual HAP emission limit of 9.0 tons per 12-month rolling time period and an aggregate HAP emission limit of 22.5 tons per 12-month rolling time period. Mr. Hood provided records of the the individual and aggregate HAP calculations during the inspection. Negative emissions of HAPs were reported for EULINEHEELING and FGSOLVENTRINSE. Mr. Tysar corrected the error and sent an updated spreadsheet via email (attachment 6). According to an email from Mr. Tysar all values were corrected such that the only negative emission value is for HAP emissions in July 2014 which was the result of erroneous inventory and purchasing reporting. Mr. Tysar also changed the FGSOLVENTRINSE HAP emissions to zero dating back to 2004 when butyl cellosolve was delisted as a HAP. The facility is not recording individual HAP emissions, but the highest aggregate HAP emissions reported in the updated and corrected spreadsheet sent by Mr. Tysar was 0.92 tons between January 2014 through June 2016. Since emissions of aggregate HAPs have been below the emission limit for individual HAPs for the past 2 years, the company has adequately demonstrated compliance with the individual HAP emission limit by default. Based on the updated records it appears MPW is in compliance

with SC 6.1b and 6.1c.

SC 6.2 requires the permittee clean the totes with a hot alkali or detergent cleaning solution, a high pressure water rinse, or by an organic solvent if the equipment being cleaned is completely covered or enclosed. According to Mr. Hood employees are using all of the above listed techniques to clean the totes.

SC 6.3 requires that the HAP content of any material received in the totes to determine from the 2003 sampling study, the HAP content of any material used to clean the totes be determined from manufacturer's formulation data, and the HAP content of Midas Strip 1200 to be determined from Appendix A of the permit. The facility is no longer using Midas Strip 1200. Instead, the facility is using Midas Strip 4810. HAP content is being determined, according to Mr. Tysar, from the 2003 sampling study, formulation data, and MSDS sheets.

SC 6.4 requires that emission calculations for HAPs and VOCs be available by the 15th day of the calendar month for the previous calendar month. Mr. Hood provided hard copies of the emissions records and emailed the complete spreadsheet with calculations and totes processed data during the inspection. Mr. Tysar sent an updated spreadsheet of the VOC emissions (attachment 6).

SC 6.5 mandates the facility maintain a written log of the hours of operation for FGFACILITY. As stated above, Mr. Hood provided records of hours of operation in conjunction with the conditions set in EUPROCESSLINE and EUOFFLINE to record the number of totes processed on an hourly basis (attachment 5).

Special Condition 6.6 requires monthly and 12-month rolling time period VOC, individual HAP, and aggregate HAP emission calculations. Records of the aggregate HAP emissions were provided as stated above when discussing Special Conditions 6.1b and 6.1c (attachment 6).

FACILITY WALK-THROUGH
During the facility walk through I inspected FGPROCESSLINE, FGOFFLINE, FGLINESOLVENTRINSE, EUIMPELLERWASH, and EUVALVEWASH equipment and processes. I did not observe any unpermitted equipment during my inspection. All of the permitted equipment and processes I saw appeared to match the descriptions in PTI 79-03A and appeared to be operating in compliance with the process/operational limits set forth in Special Conditions 3.2 and 6.2.

Special Conditions 6.7a and 6.7b specify that SVGENVENT1 and SVGENVENT2 have a diameter of 56 inches and to be 28 feet above ground

level. I was unable to view the stacks at the facility and did not determine compliance with these conditions as a result.

Discussion

Material and emission limits and monitoring and recordkeeping make up the majority of requirements in PTI 79-03A. MPW's methods for determining the number of totes processed, especially for EUOFFLINE, does not appear to be meeting the letter of the word in Special Conditions 5.1, 5.2, 5.3, and 5.4. Specifically the operating hours and totes processed data provided for FGOFFLINE does not seem to be accurate. The FGOFFLINE hour and processing data indicate that it can take anywhere between 15 minutes to 8 hours to process one tote on FGOFFLINE. This indicates to me the hours of operation and totes processed on FGOFFLINE are not accurately being kept. I will inform Mr. Hood that a hand written log of EUOFFLINE operating hours and totes processed should be logged daily by the operator to demonstrate compliance with the monitoring requirements in FGOFFLINE 5.2 and 5.3 and the accuracy of the recordkeeping requirements in FGOFFLINE 5.4.

MPW is not keeping records of individual HAP emission as required Special Condition 6.6 and were made aware of this deficiency in 2013, according to the May 5, 2013 inspection report. I again made MPW aware of the requirement to keep individual HAP records even though compliance with the individual HAP limit can be determined because the highest aggregate HAP emissions reported are one-tenth the individual HAP emission limit. As stated in the EULINEHEELING section above; MPW will be calculating the heel waste collected using a per tote average derived from five years of positive heel waste throughput and totes processed data. Butyl cellosolve use will be calculating using a per tote average as well based on five years of inventory data.

CONCLUSION

It appears, based on the information gathered during the inspection, MPW is in violation of Special Condition 5.1 of PTI 79-03A for exceeding the three tote per hour production limit for FGOFFLINE on three separate occasions between January 2014 and June 2016. Non-compliance with Special Condition 5.1 in PTI 79-03A is also considered a violation of paragraph 10. A. of Consent Order 16-2004. A violation notice will be issued.

NAME K. Kelly DATE 9/15/16 SUPERVISOR SK