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

A621836735

FACILITY: Dunn Paper, Inc.		**SRN / ID:** A6218
LOCATION: 218 RIVERVIEW ST, PORT HURON		**DISTRICT:** Southeast Michigan
CITY: PORT HURON		**COUNTY:** SAINT CLAIR
CONTACT: Robert Bombard , Environmenta Mgr.		**ACTIVITY DATE:** 08/02/2016
STAFF: Kerry Kelly	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: FCE: Based on the information gathered during the inspection, Dunn Paper appears to be in compliance with the conditions in PTI 113-97 and PTI 519-95A and applicable air rules and regulations that were evaluated.		
RESOLVED COMPLAINTS:		

On August 2, 2016 and August 3, 2016, I (Kerry Kelly) and Tyler Salamasick (August 3, 2016 only) conducted a scheduled inspection of Dunn Paper, Inc. located at 218 Riverview, Port Huron, Michigan. This facility is identified by the State of Michigan with the State Registration Number (SRN) A6218. 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, and Permit to Install (PTI)'s No. 514-95A and 113-97.

DESCRIPTION OF FACILITY LOCATION AND PROCESSES

Dunn Paper, Inc. operates a paper manufacturing facility in St. Clair County. The facility is located on the west coast of the St. Clair River at the mouth of Lake St. Clair. The surrounding area is populated primarily with residential properties. The nearest residential area is approximately 0.04 miles northwest from Dunn Paper.

Two permits, PTI 113-97 and PTI 514-95A, were issued to Dunn Paper:

PTI 113-97 was issued on August 20, 1998. Equipment in PTI 113-97 includes four paper machines. A facility-wide VOC and hazardous air pollutant (HAP) limit below the major source threshold for VOCs and HAPs for all process equipment source-wide, including equipment covered by other permits, grandfathered equipment, and exempt equipment (FGFACILITY), is included in PTI 113-97. The facility is classified as a synthetic minor opt-out for VOC's and HAPs as a result.

PTI 514-95A was issued January 6, 2006. Equipment permitted in PTI 514-95A includes a 68 MMBtu Combustion Engineering boiler and an 86.2 MMBtu/hr Nebraska Power Boiler capable of firing natural gas, No. 2 fuel oil and No. 6 fuel oil. It appears, based on the permit evaluation, that PTI 514-95A was also intended to have a facility-wide limit below the major source threshold for SO2, NOx, and CO which would make them a synthetic minor opt-out for these criteria pollutants. Though FGFACILITY is listed in the flexible group table at the beginning of this permit, FGFACILITY conditions and limitations are not in the permit. It appears the facility-wide limit is in the FGBOILERS table. The facility, therefore, at this time is not technically a synthetic minor opt-out for SO2, NOx, and CO. Mr. Scott McNutt, Plant Manager, was made aware of this issue and has hired a consultant to apply for a permit with a facility-wide limit for SO2, NOx, and CO. Mr. McNutt indicated

the permit application/modification would be submitted by October 19, 2016 (attachment 14). Major source status for SO2, NOx, and CO will not be evaluated for this inspection because the apparently intended opt-out limit was not included in PTI 514-95A.

INSPECTION

I arrived at Dunn Paper at approximately 10:30 AM on August 2, 2016 and August 3, 2016. I entered the office at Dunn Paper, 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. Robert Bombard, Environmental Manager. Mr. Bombard answered questions, provided records, and accompanied us during the inspections. In the opening meeting I asked Mr. Bombard basic questions about operations at Dunn Paper. Mr. Bombard stated Dunn Paper operates 24 hours a day, seven days a week with a staff of 150-160 employees including office staff. Mr. Bombard explained the paper making process at Dunn Paper. The process begins with the mixing of pulp or secondary fiber in one of six pulpers (four primary and two secondary). Dunn purchases the pulp it uses at this facility. The pulp is then applied to the wire of the paper machine. The wire is a conveyor that allows the water to drain from the pulp/paper. Next the paper travels to the Yankee can, which is fueled by natural gas, where further drying occurs. The paper is coated after it travels through the Yankee. Number 1 and number 4 paper machines are used to make wax paper, Number 3 paper machine is the only machine capable of applying coatings. There are three coaters on number 3 paper machine. The coatings are dried using infrared heaters.

There were no abnormal conditions, start-ups, shutdowns, or malfunctions that resulted in emissions of hazardous or toxic air pollutants and there have been no changes to the equipment/processes since the last inspection according to Mr. Bombard. The changes that took place prior to the 2013 inspection, according to Mr. Bombard, include; replacing #1 paper machine hood in 2010-2011, replacing #3 paper machine hood caps around 1999, and changing #4 paper machine burner controls. In addition to the permitted equipment Mr. Bombard informed me that Dunn has seven parts cleaners and space heaters.

PTI 113-97

SC 13 limits the 12-month rolling VOC emission rate to 61.0 tons per year. Mr. Bombard provided records of the 12-month rolling VOC emissions for January 1, 2014 through June 30, 2016 (attachment 1). The highest reported 12-month VOC emissions for the four paper machines was 6.97 tons reported in January 2014. These records indicate that Dunn Paper is in compliance with 12-month rolling 61 ton VOC emission limit in SC13.

SC 14 limits the hourly VOC emission rate for any one of the four paper machines to 40.0 tons per hour. Mr. Bombard provided records of the hourly VOC emissions for paper machines 1, 3, and 4 for June 2016 and May 2016 (attachment 2). Mr. Bombard stated that paper machine 2 has not operated in a few years. On August

3, 2016 I observed that the paper machine 2 Yankee hood was cut off from the steam supply at the Johnson Joint and was not operating. The highest reported hourly VOC emissions out of all three machines was 14.53 pounds reported in May 2014 for paper machine 3. These records indicate that Dunn Paper is in compliance with 40 pound hourly VOC emission limit in SC14.

Visible emissions from the process shall not exceed a 6-minute period of 0% opacity according to SC15. I did not observe any visible emission from the process during the inspection.

SC 16 allows DEQ to require VOC emission rate verification testing for operating approval. It is my understanding that DEQ has not required VOC emissions testing.

Dunn Paper is required, per SC 17.A., to keep monthly record of the identification and category for each VOC containing material, the VOC content in pounds/gallon as received and applied of each VOC containing material, and the amount of gallons of each material used for each VOC containing material. Mr. Bombard provided a copy of the VOC containing ~~machine~~ materials and coating chemicals used, the VOC content of the materials used, and pounds/pound as received and applied for VOC containing materials and the amount in of VOC containing material used in tons (attachment 3).

SC 17.B. requires Dunn keep monthly records of the hours of operation for each paper machine. Mr. Bombard provided records of the hours each paper machine was running each material each month (attachment 2). The total hours were not summed for the month however. There are no conditions in PTI 113-97 that restrict the amount of hours of operation of the paper lines, there is only an hourly VOC emission rate. Therefore, the records provided by Mr. Bombard are sufficient to demonstrate compliance with SC 17.B.

Mr. Bombard provided purchase records of the VOC containing materials as required per SC 17.C (attachment 4). It appears Dunn Paper is in compliance with SC 17.C.

SC 17. D. and E. require Dunn to keep monthly and 12-month rolling VOC emission calculations. Mr. Bombard provided records of the monthly and 12-month rolling VOC emissions for January 1, 2014 through June 30, 2016 (attachment 1). The highest reported monthly VOC emissions was 0.78 tons reported in July 2014. The highest reported 12-month VOC emissions for the four paper machines was 6.97 tons reported in January 2014. These records indicate that Dunn Paper is in compliance with SC 17. D. and E.

Monthly and 12-month rolling records of the gallons of grease repellant and release agent used for January 2014 through required by SC 17. F. were provided by Mr. Bombard (attachment 5). The highest 12-month rolling grease repellant

usage reported for January 2014 through June 2016 was 9,578 gallons. This is below the 34,000 gallon 12-month rolling limit set forth in SC 21. According to the records of release agent usage provided by Mr. Bombard, Dunn Paper has not used release agent from January 2014 through June 2016. This is within the limits of 11,000 gallons per 12-month rolling set forth in SC 22.

Dunn Paper is required to determine the VOC content of the materials used by either Federal Reference Method 24 or manufacturer's formulation data according to SC 18. Mr. Bombard stated the VOC content is determined using SDS or manufacturer's formulation data.

SC 19 states that disposal of waste materials used in the process must be performed in a manner which minimized the introduction of air contaminant to the outer air. Dunn Paper uses a Lamella system to minimize the introduction of air contaminates to the outer air. The Lamella system separates particles from the liquid. The liquid is reused in the process and the tailings go to a dumpster and landfill. Waste that can no longer be reused is stored in totes which are collected by US Ecology.

SC 20 requires exhaust gases the process equipment be discharged unobstructed vertically upwards to the ambient air and establishes the maximum diameters and minimum stack height. I was unable to identify the specific stacks at the facility and could not determine compliance with SC 20.

The individual HAP emissions at the facility are limited to 8.9 tons per year and the aggregate HAPs for the facility are limited to 22.4 tons per year in SC 23. To demonstrate compliance with these limits Dunn Paper is required to keep records, per SC 24, of the chemicals which contain HAPs at the facility, the contents of each HAP and total HAPs, purchase orders and invoices for all HAP containing materials, and monthly and 12-month rolling calculations of the individual and aggregate HAP emissions for the facility. Mr. Bombard provided records of the list of HAP containing materials (attachment 13), purchase records of HAP containing materials (attachment 4) and the monthly individual HAPs and the monthly and 12-month rolling aggregate HAPs emissions for January 2015 through August 2016 (attachments 6 and 7). The highest reported 12-month rolling individual HAP emissions during this period were 0.5 tons of chlorine reported in December 2015. The highest reported 12-month rolling aggregate HAP emissions during this time period was 0.74 tons reported in July 2015. Based on these records Dunn is in compliance with the the 12-month individual HAP emission limit of 8.9 tons and the aggregate 12-month rolling HAP emissions limit of 22.4 tons.

PTI 514-95A

As stated in the facility description, the equipment permitted in PTI 514-95A are two boilers (EU00001 and EU000017). EU00001 is a 68 MMBtu/hr Combustion Engineering boiler which is capable to fire natural gas, No. 2 fuel oil and No. 6 fuel oil according to PTI 514-95A. According to Mr. Bombard EU00001 last used fuel

oil and last operated in about 2009. This information was supported in the MAERS report history and records observed at the facility. I observed EU00001 and its nameplate during the inspection. The nameplate stated that the boiler is a Combustion Engineering Company Inc. Steam Generator built in 1938. The boiler was not operating during the site inspection. SC 1. Since this boiler has not operated in approximately six years, compliance with EU00001 SC's 1.1 through 1.9 were neither evaluated nor verified.

SC's 2.1 through 2.11 of PTI 514-95A pertain to EU 00017. EU00017 is a 86.2 MMBtu/hr Nebraska boiler which is capable of firing natural gas and No. 2 fuel oil according to PTI 514-95A. According to Mr. Bombard EU00017 last used fuel oil in about 2009. This information was supported in the MAERS report history. I observed EU000017 and its nameplate during the inspection. The nameplate stated that the boiler is a Nebraska boiler, serial number D-3631 and built in 1996 (attachment 8). The boiler was operating during the site inspection. The rated heat capacity, according to documentation from the burner supplier on file at the AQD, shows a rated heat input capacity of 94.7 MMBtu/hr. I will inform the company that they need to update the rated heat input capacity when addressing the synthetic minor opt-out limit for this permit.

EU00017 SC's 2.2, 2.8, and 2.9 apply when using No. 2 fuel oil in the Nebraska boiler. Since No. 2 fuel oil has not been used in this boiler for approximately 6 years, I did not evaluate compliance with these conditions.

SC 2.1c limits the NOx emission rate when firing natural gas to 0.041 lb/MMBtu and SC 2.4 requires the Nebraska boiler be equipped with a low NOx burner. The Bill of Materials for the low NOx burner was submitted in November 2013 and is on file at the AQD office. The emissions guarantee from the burner supplier listed on the Bill of Materials is 35 ppm (0.042 lb/MMBtu) NOx. SC 2.4 To ensure the burner is maintained and operating properly the operator, Lyle, explained that the boiler is inspected and certified once a year by the Michigan Department of Licensing and Regulatory Affairs. Mr. Bombard gave me a copy of the boiler inspection certificate. Lyle monitors steam, fuel, and water flow to ensure the boiler is operating properly.

SC 2.5 and 2.6 require EU00017 be equipped with a properly installed, calibrated and maintained monitor used to measure the No. 2 fuel oil and natural gas usage rate on a daily basis. I inspected the monitor on the boiler in the control room. The monitor included a fuel oil and natural gas flow rate meter. During the inspection the monitor readout showed the fuel oil usage was zero during the inspection and the natural gas usage rate was 47.8 cu ft. Lyle stated that the monitor is calibrated often. Mr. Bombard provided a copy of the Nebraska Boiler calibration and maintenance records (attachment 9).

SC 2.7 requires monitoring and recording of emissions and operating information to show compliance with Federal Standards of Performance for New Stationary

Sources in 40 CFR 60 Subpart Dc. Mr. Bombard provided records of the natural gas used in the Nebraska boiler and SO2, NOx, and CO emissions for January 2015 through June 2016 to demonstrate compliance with SC 2.7 (attachment 10).

Monthly and 12-month rolling natural gas usage records are required to be kept per SC 2.10. Mr. Bombard submitted 12-month rolling natural gas usage records for January 2015 through August 2016 (attachment 11). The highest reported 12-month rolling natural gas usage for the Nebraska Boiler was 420,940 MCF reported in March 2015. These records appear to demonstrate compliance with SC 2.10.

SC 2.11 requires the stack associated with EU00017 be a maximum of 42 inches in diameter and at least 75 feet above ground level. I observed the stack for EU00017. It appears the stack meets the diameter and height restrictions.

SC's 3.2 through 3.9 apply to FGBOILERS. FGBOILERS includes EU00001 and EU00017. SC 3.2 requires sweet natural gas be used when firing natural gas in FGBOILERS. According to Mr. Bombard, Dunn Paper uses sweet natural gas provided by BP in the boilers.

The use of fuel oil at the same time in both boilers is prohibited in SC 3.3. EU00001 has not operated in six years demonstrating that EU00001 and EU0017 have not used fuel oil at the same time in the past 6 years.

SC 3.4., 3.5, and 3.6 are applicable only when using No. 6 and No. 2 fuel oil in the boilers. Dunn has not used No. 6 or No. 2 fuel oil in either of the boilers for the past six years.

Monitoring of the monthly natural gas fuel use for both boilers are required to be kept in SC 3.7. Mr. Bombard provided records of the nature gas fuel usage for January 2015 through June 2016.

SC 3.9 requires Dunn keep monthly and 12-month rolling SO2, NOx and CO emissions for FGBOILERS. Mr. Bombard provided monthly and 12-month rolling SO2, NOx, and CO emission records for January 2015 through June 2016 (attachment 10). The highest reported 12-month rolling SO2 emissions for this time period was 0.13 tons. The SO2 emissions reported are within the 89 ton/year limit set forth in SC 3.1a. The highest reported 12-month rolling NOx emissions for January 2015 through June 2016 was 9.28 tons reported in March 2016. This is within the 45.0 ton limit set forth in 3.1b. The highest 12-month rolling CO reported for January 2015 through June 2016 was 33.15 tons which is below the CO emission limit in SC 81.1 tons.

COLD CLEANERS

There are seven cold cleaners at Dunn Paper. I inspected the cold cleaners at the facility. Each cleaner had operating procedures posted and the lids were closed to

all but one cleaner. Mr. Bombard attempted to close the lid but was unsuccessful. I was informed by Mr. Bombard that he was going to have a meeting with staff and would let them know the lids to the cold cleaners must remain closed when not being accessed by the operator. Mr. Bombard called within a few days of the inspection and let me know he had the meeting and that the lids to all cold cleaners were closed now and would remain closed when not being accessed by the operator. There were racks for drying parts on the cold cleaners during the inspection. Mr. Bombard provided the SDS for the solvent used in the cold cleaners (attachment 12). The solvent is Safety-Kleen Premium Solvent which has a Reid Vapor Pressure of 0.6 mm Hg (approximately 0.0116 psia). It did not appear that the solvent was heated or agitated. The solvent waste drums were covered. The cold cleaners appear to be exempt from permitting per R336.1281(h) and in compliance with R336.1707.

SPACE HEATERS

The space heaters at Dunn are included in PTI 113-97 permit application in Table 2: Combustions Emission from Exempt Processes. In the table the total rated capacity for all space heaters is 4.06 MMBtu. In MAERS each of the space heaters are rated less than 50,000,000 MMBtu/hr and are exempt per 282(b)(i). I observed one of the space heaters at Dunn Paper. The heater I saw was approximately 2 ft x 2 ft x 1ft in size. I was unable to see the nameplate or any other identifiers on the space heater. Based on the information in the PTI 113-97 permit application, MAERS, and my observations it appears the space heaters at Dunn are exempt per 282(b)(i).

CONCLUSION

Based on the information gathered during the inspection, Dunn Paper appears to be in compliance with the conditions in PTI 113-97 and PTI 519-95A and applicable air rules and regulations that were evaluated.

NAME K. Kelley DATE 9/23/16 SUPERVISOR SK