

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

N078057275

FACILITY: LOUISIANA-PACIFIC CORP NEWBERRY PLANT		SRN / ID: N0780
LOCATION: 7299 N COUNTY ROAD 403, NEWBERRY		DISTRICT: Marquette
CITY: NEWBERRY		COUNTY: LUCE
CONTACT: Nick Waddell , Newberry Plant Environmental, Health, & Safety Mgr		ACTIVITY DATE: 03/10/2021
STAFF: Michael Conklin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Targeted inspection for FY 21.		
RESOLVED COMPLAINTS:		

Facility: Louisiana Pacific Corporation – Newberry Plant (SRN: N0780)

Location: 7299 North County Road 403, Newberry, Luce County, MI 49868

Contact(s): Nick Waddell, EHS Manager, 906-293-4523

Regulatory Authority

Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.

Facility Description

The Louisiana Pacific Corporation – Newberry Plant (LP Newberry) is an engineered wood product manufacturing facility that produces strand board siding for building construction. The engineered wood siding consists of wood flakes, resins, waxes, zinc borate, and a paper overlay that is hot pressed together. The facility is located in Newberry, MI, a rural area in Luce County that is in attainment/unclassified for all criteria pollutants.

Process Description

The strand board siding process begins with green logs loaded into the hot ponds to be warmed before moving up the ladders toward the de-barker. The warmed logs are processed through the de-barker and then cut into smaller sections. The waste bark material is routed to the bark bin as fuel for the two Konus thermal oil heaters (EUKONUSTOH). The debarked, sectioned logs are then fed into the Waferizer to create wood flakes. The flakes are routed to one of two green bins as temporary storage before moving into the dryer. The rotating drum dryer is used to reduce the moisture content of the flakes from about 50% to 5.5% moisture content. From the dryer, the flakes are routed to one of two dry bins as temporary storage for the “surface” or “core” of the board. The flakes then move into the respected “surface” or “core” blenders where additives are mixed in to form the desired properties of the product. The mixture then moves through the

former machines to create the “wet matt”. Fines are added to the top, along with paper overlay before entering the press. The board press system (EUPRESS) creates the final thickness and moisture content of the board. The pressed boards then move into the finishing section where they are cut to final dimensions, coated with primer, and graded before being packaged and shipped off-site to customers.

Emissions

Engineered wood product manufacturing involves the generation of sawdust and wood particles from sawing operations which contribute to levels of atmospheric PM and PM10. Cyclones and/or baghouses (EUBAGHOUSE1-9) act as capture/collection systems for air pollution control and product recovery by separating wood residue from the airstream of the pneumatic handling systems.

Volatile organic compounds (VOCs), HAPs, and toxic air contaminants (TACs) are emitted during the drying of the wood flakes (EUDRYERRC) and the hot press process (EUPRESS) of forming the boards. VOCs and condensable PM are emitted from these processes by evaporation during the reduction in moisture content of the wood flakes.

The source also contains wood-fired equipment. Waste wood residue is collected and used as fuel in the McConnell burner for the dryer (EUDRYERRC) and the two burners for the Konus thermal oil heaters (EUKONUSTOH). The waste wood residue includes bark and fines from cutting operations. The primary pollutants emitted from wood-fired combustion include PM, CO, NO_x, and VOCs. The incomplete combustion of the organic material causes the release of these pollutants. Design and operating conditions (air/fuel ratio) contribute to combustion efficiency that in turn affects the quantity of pollutants emitted. The dryer utilizes a wet electrostatic precipitator (WESP) for filterable particulate control and a regenerative thermal oxidizer (RTO) for VOC and condensable organics control. The two Konus thermal oil heaters utilize separate cyclones and a shared baghouse for filterable particulate control.

LP Newberry also contains natural gas-fired equipment, including a back-up Geka thermal oil heater (EUGEKATOH) and three natural gas-fired burners for the dryer (EUDRYERRC). Pollutants emitted from the combustion of natural gas-fired equipment includes nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), particulate matter (PM), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and trace amounts of sulfur dioxide. CO and VOC emissions are directly related to combustion efficiency. Higher combustion temperatures, longer residence times, and well mixing of fuel and combustion air results in greater combustion efficiency and lower emissions of CO and VOCs. Emissions of sulfur oxides are low since processed natural gas contains a very low sulfur content. PM emissions are also low since natural gas is a gaseous fuel. Nitrous oxide and methane emissions are related to the combustion temperature and amount of excess oxygen.

Emissions Reporting

LP Newberry is required to report its annual emissions to Michigan Air Emissions Reporting System (MAERS). The following table lists the source total emissions for the reporting year 2019.

Pollutant	Emissions (TPY)
CO	58.45
Lead	<1
NOx	25.27
PM10, FLTRBLE	23.40
PM10, PRIMARY	<1
PM2.5, FLTRBLE	1.22
PM2.5, PRIMARY	<1
SO2	2.0
VOC	20.79

The emission units reported to MAERS for 2019 include EUDRYERRC, EUKONUSTOH, and EUPRESS. From reviewing LP Newberry's 2019 MAERS report and previous years reports, the source has historically not been reporting all emission units contained in the ROP. The following emission units have not been reported to MAERS: EUGEKATOH, EUCOATING, EUBAGHOUSE1, EUBAGHOUSE2, EUBAGHOUSE3, EUBAGHOUSE5, EUBAGHOUSE6, EUBAGHOUSE8, EUBAGHOUSE9, EUCLEANERS, EUDRYBACKUP, EUTODIESEL, and EUFIREPUMP. The source is required to report emissions from all emission units listed in the ROP.

Regulatory Analysis

LP Newberry is subject to MI-ROP-N0780-2018a. The source is considered major for CO, PM10, NOx, and VOC because the potential-to-emit (PTE) for these pollutants is over 100 tpy. The facility is considered a synthetic minor source for HAPs because the source took source-wide limits to restrict the PTE to less than the major source thresholds of 10 tpy for individual HAPs and 25 tpy for aggregate HAPs.

EUDRYBACKUP, EUTOHDIESEL, and EUFIREPUMP at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Area Sources promulgated in 40 CFR Part 63, Subparts A and ZZZZ. EUTOHDIESEL is also subject to 40 CFR Part 60, Subpart IIII.

Compliance History

The facility was last inspected in December 2018 and found to be in compliance with all applicable air quality rules and federal regulations at that time. No violation notices have been issued since the last inspection date.

Inspection

A targeted inspection was scheduled for March 10, 2020, to determine LP Newberry's compliance with MI-ROP-N0780-2018a. The contact for the facility is Nick Waddell, Environmental, Health, and Safety (EHS) Manager for the plant. The inspection began by discussing MAERS reporting and recordkeeping, then a tour and inspection of the facility was provided.

SOURCE-WIDE

LP Newberry is considered a synthetic minor source for HAPs since the facility took emission limits to restrict the potential-to-emit to less than 9.9 tpy for individual HAPs and 24.9 tpy for aggregate HAPs. With having these source-wide emission limits, the facility is required to track the quantity of each HAP containing material used, the HAP emission factor of each HAP containing material, along with individual and aggregate HAP emission calculations for each calendar month and on a 12-month rolling time basis.

The facility maintains a spreadsheet that tracks monthly and 12-month rolling HAP emissions from all sources of HAP emissions at the mill. The dryer and the press are the greatest sources of HAP emissions at the facility. The mill processes hardwood species of trees and uses chemical additives to create desired properties of the product. With the combustion and drying of these wood species and chemical additives comes the release of HAPs in the form of VOCs and condensable organics. Some of the HAPs emitted, but not limited to, are acetaldehyde, acrolein, formaldehyde, methanol, phenol, and methylene diphenyl diisocyanate (MDI).

Following the press expansion project completion in November 2019, stack testing for compliance with the emission limits established through PTI No. 43-19 was scheduled for May 2020 on the Konus thermal oil heaters, dryer, and press. Stack testing was required for these emission units within 180 days of resuming regular operation after the project was completed. During the May 2020 stack test, the I.D. fan for the press stack suffered a malfunction that resulted in the press not being able to be tested at the time. The dryer and Konus thermal oil heaters, however, were tested. The Konus thermal oil heaters passed for all the respective emission limits, but the dryer failed for acrolein and formaldehyde.

LP Newberry responded with a letter to the AQD notifying they were aware of the performance test results on the dryer and were taking corrective actions to address the issue before re-testing. They believed the RTO was not performing at optional conditions and did not know when the issues began. During the test, however, no performance parameters being monitored provided any indication the RTO was malfunctioning. Corrective actions included performing a thorough inspection and maintenance on the RTO to verify proper operation of valve-timing and thermocouple placement, along with performing engineering testing to determine the formaldehyde destruction rate in the RTO.

An RTO inspection was performed by LDX Solutions on 06/24/20 and 06/25/20. The purpose of the inspection was to determine possible causes of the bypassing of process gas from the inlet duct to the outlet duct which could cause incorrect formaldehyde readings during stack emission testing. The report notes gaps in insulation of the combustion chamber. The LPD saddles had settled and pulled the insulation near and below the media line and created gaps. The gaps exposed the outer layer to full chamber temperature and created hot spots. The exposed gaps were packed with insulation. The inlet and outlet diverter valves were checked for proper seating and possible bypassing. #4outlet disc was off set by 3/16", #2 inlet and outlet discs were off seat 1/8". Plant maintenance adjusted the jack bolts on the shaft bearing and was able to achieve metal to metal contact on all valves. Diverter valve bushing and bearings were replaced by plant maintenance to take slop out of the system. It was also noticed the cross over duct damper was open about 3/16". The cross over duct allows untreated gas to pass directly from the inlet to outlet. A plan was put in place to install a blind to prevent the inlet to outlet bypassing.

In August 2020, the dryer was re-tested and the press was tested for the first time since the project was completed. Both the press and dryer passed their respective emission limits during the August 2020 test.

Since the facility is required to test for certain HAPs and required to maintain 12-month rolling HAP emission calculations using emission factors from the most recent stack test for those tested HAPs, questions arose regarding which emission factors are required to be used and for what

length of time. The AQD maintained that LP Newberry is required to use the emission factors for pollutants that were tested for in the most recent stack test. Following a sequential compliance test, the facility is to begin using those stack test emission factors going forward in the 12-month rolling emission calculations.

After internal discussions, it was decided LP Newberry would use prior stack test emission factors for the dryer up through April 2020, from May 2020 through July 2020, the facility would use the emission factors from the May 2020 stack test, and then from August 2020 through current, the facility would use the emission factors from the August 2020 stack test. For the press, the facility would use the prior stack test emission factors up through July 2020, and then use the emission factors from the August 2020 stack test going forward. The initial stack test that is required to be performed within 180 days from resuming normal operation following project completion, is to ensure the changes in the process and associated air pollution control devices (APCD) are operating properly and in compliance with the emission limits set forth. The 2020 stack test results are shown in Table 1.

Emissions (lb/hr)	May 2020		August 2020	
	Konus	Dryer	Dryer	Press
PM/PM10	0.508	1.158	-	2.089
CO	4.82	17.22	8.26	0.84
NOx	4.08	4.31	3.14	0.81
VOC	0.04	2.63	3.33	5.16
Acetaldehyde	-	0.70	0.23	-
Acrolein	-	0.29	0.067	-
Formaldehyde	-	1.78	0.88	1.58
Phenol	-	-	-	0.66
MDI	-	-	-	0.055

Table 1. LP Newberry 2020 stack test results in lb/hr.

Applying the above methodology in the use of emission factors to calculate the 12-month rolling HAP emissions, the facility remains under their synthetic minor limits for HAPs through February 2021. As of March 1, 2021, the highest 12-month rolling total for a single HAP is 9.8 tons (98.83% of the limit) and 23.3 tons (93.61% of the limit) for aggregate HAPs. The highest single HAP is formaldehyde with a significant portion of the emissions coming from the dryer and press. While the facility is currently in compliance with the source-wide limits, they are closely approaching the single HAP limit when applying the failed formaldehyde emission factor from the dryer for a 3-month period. The facility will need to closely monitor production to remain in compliance with the source-wide HAP limits.

EUKONUSTOH

This emission unit consists of two 19.9 MMBtu/hr Konus thermal oil heaters that use waste wood material from de-barking and cutting operations as fuel. These units provide hot oil for the press and utilize heat exchangers to provide process heat to other equipment throughout the facility. Emissions from the Konus thermal oil heaters are controlled by separate cyclones and a shared baghouse. The baghouse is a CAM subject control device. Under normal operations, only one thermal oil heater is operated at a time. Special Condition (SC) III.2 limits the transitional period of both heaters operating to no longer than six hours.

SC I, V.1, V.3

EUKONUSTOH was last tested in May 2020, for compliance with the PM, PM10, NO_x, CO, and VOC emission limits. All testing results showed the emissions were below the established emission limits.

SC III.1, III.2,

At the time of the inspection, Konus #1 (K1) was operating and Konus #2 (K2) was not in operation. Wood bark was observed being fed into K1 as fuel (SC III.1). No other fuels were observed being fired. A control room provides real-time data on the thermal oil heater system. The control system screen showed the K1 baghouse bypass damper was closed and flue gas was being routed through the cyclone and baghouse. The K1 cyclone was showing a differential pressure reading of 2.13 in. WC and the I.D. fan to the baghouse was reading 80.8 Amp. The differential pressure across the baghouse was reading 2.86 in. WC and the stack outlet temperature was 274 degrees F. These parameters show the air pollution control devices were being operated in a satisfactory manner. No visible emissions were observed from SVKONUS.

SC II.1, VI.1-2, VI.4,

The two Konus thermal oil heaters have a wood fuel limit of 24,000 tpy based on a 12-month rolling time period. LP-Newberry maintains a spreadsheet that provides the wet tons on a 12-month rolling time period. For 2019, the total wood fuel burned in the Konus heaters was 10,424 tons and for 2020, 9,884 tons. For the months in between the end of the years, the 12-month rolling total never exceeded 10,500 tons. The facility also records the operating hours of the Konus thermal oil heaters. For 2019 through 2020, the Konus heaters averaged 644 hours of operation per month.

The facility is required to record the monthly and 12-month rolling CO emissions from the two Konus thermal oil heaters using the hourly average emission rate from the most recent performance test. A spreadsheet is maintained that tracks the monthly emissions as well as the emission factors being used in the calculation. For 2019, CO emissions were 3.0 tpy and for 2020, 9.2 tpy.

SC V.2, VI.5-10

Baghouse #4 for the two Konus thermal oil heaters is a CAM subject control device. Indicator of proper operation is the presence of visible emissions. The facility is required to perform and record daily visual opacity observations. Records were provided showing a daily Baghouse Preventative Maintenance Report. The example report, dated 7-22-20, provides the Magnehelic reading, if the baghouse is operating properly, if there are any visible emissions, and if there is any discharge from the baghouse. The report also provides a section for any malfunctions and maintenance that occurred on the baghouse, with shut down time, start-up time, and notes to describe detailed work performed on the baghouse. The example report provided showed the Magnehelic gauge was reading 2.9 in. WC and no visible emissions were observed. Another example report was provided, dated 8-27-20 at 4:51 PM, showing the magnehelic reading was 2.07 in. WC and no visible emissions were observed.

SC VIII.1

SVKONUS appeared to be at least 100 feet from the ground and no more than 60 inches in diameter.

EUGEKATOH

This emission unit is a natural gas-fired Geka thermal oil heater with a rated heat input rate of 40 MMBtu/hr. This unit is used a back-up thermal oil heater for the Konus thermal oil heaters.

SC I, II.1

The Geka thermal oil heater is allowed to only burn natural gas. The emission limits for this emission unit are enforced through the material limit of only natural gas. LP Newberry records the amount of natural gas burned in the Geka thermal oil heater monthly.

SC VIII.1

SVEUGEKATOH appeared to be at least 60 feet from the ground and no more than 40 inches in diameter.

EUDRYERRC

The dryer system consists of a rotating drum with four direct-fired burners. One is a wood-fired McConnell burner with rated heat input of 42 MMBtu/hr and the other three are natural gas-fired Maxon burners with rated heat input of 19.5 MMBtu/hr each. All four burners are not always simultaneously operated. Green flakes are pneumatically conveyed from the green bins into the dryer drum at the inlet and move in parallel with the flue gas to the outlet of the dryer drum with a reduced moisture content. The dryer cyclone separates the dry flakes and fines from the dryer exhaust stream. The exhaust from the cyclone is routed to the WESP and RTO. The dryer system uses a WESP for PM control and an RTO for VOC and condensable organics control. Both the WESP and RTO are CAM subject control devices.

SC I, V.1, V.2, V.3, VI.19

The dryer was last tested for compliance with the CO, NO_x, VOC, ACE, HCOH, and ACR emission limits in August 2020. Testing results showed the dryer emissions were below the established emission limits.

LP Newberry performs daily visible emission observations on the RTO stacks and records the findings on the report sheet, "Fugitive or Smoke Emission Inspection Outdoor Location". Example records were provided for the dates 7-27-20 and 8-25-20. For both dates, there were no visible emissions observed.

SC III.1-3, VI.2-11, VI.15-16

During the inspection, the dryer was in operation. A control system for the dryer, ESP, and RTO is used to monitor real-time performance parameters. The wood-fired McConnell burner was in operation, while the natural gas-fired burners for the dryer were not operating. The inlet temperature of the dryer was reading 1,571 degrees F and the outlet was reading 288 degrees F. The feed rate to the dryer was reading 27.1 ton/hr of wet flake.

The cyclone, WESP, and RTO were in operation while the dryer was operating. The differential pressure across the dryer cyclone was reading 4.4 in. WC. The CAM indicators of performance for the WESP are the temperature at the outlet of the quench section and the secondary voltage for each of the two parallel sections of the wet ESP. Excursions for these indicators are a temperature greater than 180 degrees F and a secondary voltage less than 30 kilovolts. The control system for the WESP was showing a quench outlet temperature hourly average of 153 degrees F, along with secondary voltage across the first section of 50 KVA and across the second section of 45 KVA. No wash liquor from the WESP is being introduced to EUDRYERRC. The CAM indicator for the RTO is the combustion temperature. A combustion temperature less than 1525 degrees F is considered an exceedance. During the inspection, the control panel on the wall for the RTO was showing a combustion temperature of 1576 degrees F. All duct work appeared to be intact with no leaks. No visible emissions were observed from the RTO stack (SVRTOSTACK). Based on the performance parameters observed, the cyclone, WESP, and RTO appear to be operating in a satisfactory manner.

Example reports were provided that note the WESP operating parameters every hour over a 24 hour period. The "E-Tube Operating Report" tracks the quench inlet and outlet temperature, inlet and outlet differential pressure, along with the spark rate, voltage, and current for each section of the WESP. The example reports were provided for the dates 7-5-2020, 8-13-20, and 8-28-20. The three reports indicate the quench outlet temperature stays between 150 and 180 degrees F, and the voltage for each section stays between 30kV and 60kV.

A similar operating report for the RTO is maintained at the facility. The "RTO Operating report" tracks many performance parameters of the RTO every two hours over a 24-hour period, including the combustion chamber temperature. Example reports were provided for the dates 8-25-20 and 8-31-20. The reports provided show the combustion temperature of the RTO staying above 1525 degrees F during operation.

SC VI.1

LP Newberry is required to track the amount of CO and VOC emitted from EUDRYERRC monthly and on a 12-month rolling basis using the most recent available compliance testing data. For the months during 2019 and 2020, the 12-month rolling for CO was between 36.9 tpy to 47 tpy. The 12-month rolling VOC emissions were between 6.5 tpy to 9.8 tpy. Based on the records reviewed, EUDRYERRC appears to be staying below the 78.34 tpy CO and 14.07 tpy VOC limits.

SC VI.12-13

The facility is required to track the amount of finished product produced on a 12-month rolling basis. For 2019, the facility produced 85,988 tons and for 2020, the facility produced 92,891 tons. Only hardwood species were processed through the facility during 2019 and 2020.

SC VI.14

The facility is required to record the date, time, and length of each RTO bakeout. According to records provided, the last RTO bakeout occurred on 6/23/2020 for a period of 3 hours and 15 minutes.

SC VI.17

Records were provided of inspections and maintenance performed on the RTO system for 2019 and 2020. The system includes the VFD A.C. drive, fan, and RTO. The records provided show inspections and maintenance are being performed according to the MAP. For example, on 06/26/20, records note the RTO valve drive train was rebuilt. This maintenance performed is synonymous to the maintenance stated in the RTO inspection report.

SC VIII.14

SVRTOSTACK appeared to be at least 100 feet above the ground and no more than 64 inches in diameter.

EUPRESS

The hot press system forms the final board thickness of the product. Thermal oil provides heat for the press from the thermal oil heaters. The press underwent an expansion project in November 2019 by having the addition of 17 press flights with vented platens. The vented platens capture a portion (30%) of the press exhaust and route it to the dryer system. As a result, roughly 30% of the press's PM, VOCs, and HAP emissions will be controlled by the WESP and RTO. The other 70% of the emissions are drawn out through the press stacks uncontrolled.

SC I, V.1-2

The press was last tested in August 2020 for compliance with CO, NO_x, VOC, formaldehyde, phenol, and MDI emission limits. The test results showed the press was in compliance with all the established emission limits.

SC I, II, VI.1-3

The facility is required to record the amount of PM, PM-10, NO_x, CO, VOCs, and formaldehyde emitted from EUPRESS by using the hourly average emission rates from the most recent available performance test. LP Newberry provided a spreadsheet that tracks the monthly and 12-month rolling emissions from EUPRESS with the emission factors being used. From January 2019 through

October 2019, the emission factors being used are from the September 2015 test. For the period November 2019 through December 2020, the emission factors being used are from the August 2020 test since this is the most recent emissions data for the press since the project occurred. For 2019, PM and PM10 emissions were 18.4 tpy, NOx emissions were 1.9 tpy, CO emissions were 2.6 tpy, VOC emissions were 14.5 tpy, and formaldehyde emissions were 4.6 tpy. For 2020, PM and PM10 emissions were 6.9 tpy, NOx emissions were 2.6 tpy, CO emissions were 2.7 tpy, VOC emissions were 17.1 tpy, and formaldehyde emissions were 5.2 tpy. Based on the records provided, the press is in compliance with the PM, PM-10, NOx, CO, VOCs, and formaldehyde yearly limits.

The facility is required to track the amount of finished product produced on a 12-month rolling basis. For 2019, the facility produced 85,988 tons and for 2020, the facility produced 92,891 tons. Only hardwood species were processed through the facility during 2019 and 2020.

SC VIII.1-2

The press east and west stacks appeared to be at least 75 feet above the ground.

EUCOATING

This emission unit consists of two paint booths for the addition of primer to the boards. After the boards are processed through the trim saws, the boards enter the first paint booth to receive primer on the grooved sides. The first paint booth is equipped with dry exhaust filters and uses a natural gas-fired drying oven to cure the primer on the boards. Before the boards are packaged, another paint booth is used for touch-up and around the edges. The second paint booth is equipped with dry exhaust filters and does not have a natural gas-fired oven after it.

SC III.1

At the time of the inspection, dry exhaust filters were observed in each of the paint booths and operating properly. Additional exhaust filters were also observed at the facility for change-out as necessary.

SC VI.1-3

LP Newberry maintains the amount of primer used (in gallons) through the paint booths on a monthly basis. For example, in December 2020, the facility used 9,225 gallons of paint.

An environmental data sheet from the supplier, Axalta, for the brown primer was provided. The data sheet notes the VOC content minus water is 0.0 lb/gal. Based on there being no VOC or HAP compounds in the coating, there are no VOC emissions to report.

EUBAGHOUSE1

This emission unit includes Carter-Day Baghouse 1 that separates pneumatically conveyed fines from Baghouse 5 and the end/side saws. Collected fines from Baghouse 1 are routed to the McConnell hammermill, which then moves the fines to the McConnell fuel bin for the wood-fired McConnell burner at the dryer. EUBAGHOUSE1 is a CAM subject control device with an indicator of performance being visible emission observations.

SC III.1, VI.1-5

At the time of the inspection, Baghouse 1 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE1.

The facility performs daily visible emission observations on EUBAGHOUSE1 when it is in operation and keeps the records on file. Example records were provided for the dates 7-27-20 and 8-25-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE1, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 3.8 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 3.0 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE1 appeared to be at least 60 feet above the ground and having a maximum diameter no more than 42 inches.

EUBAGHOUSE2

This emission unit includes Carter-Day Baghouse 2 that separates pneumatically conveyed fines from the mat forming line, including the flake resin application operation, flying cutoff saw, and the flake reclaim system. EUBAGHOUSE2 is a CAM subject control device with an indicator of performance being visible emission observations.

SC III.1, VI.1-5

At the time of the inspection, Baghouse 2 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE2.

The facility performs daily visible emission observations on EUBAGHOUSE2 when it is in operation and keeps the records on file. Example records were provided for the dates 7-27-20 and 8-25-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE2, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 5.5 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 0.8 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE2 appeared to be at least 35 feet above the ground and having a maximum diameter no more than 36 inches.

EUBAGHOUSE3

This emission unit includes the baghouse that separates fines from the Konus thermal oil heaters fuel bin and the Waferizer green fines blower. EUBAGHOUSE3 is a CAM subject control device with an indicator of performance being visible emission observations.

SC III.1, VI.1-5

At the time of the inspection, Baghouse 3 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE3.

The facility performs daily visible emission observations on EUBAGHOUSE3 when it is in operation and keeps the records on file. Example records were provided for the dates 7-27-20 and 8-25-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE3, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 1.0 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 1.4 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE3 appeared to be at least 60 feet above the ground and having a maximum diameter no more than 33 inches x 52 inches.

EUBAGHOUSE5

This baghouse separates fines from the two dry flake bins, conveyors, and dryer screen. The fines collected are routed to Baghouse #1.

SC III.1, VI.1

At the time of the inspection, Baghouse 5 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and

recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE5.

The facility performs daily visible emission observations on EUBAGHOUSE5 when it is in operation and keeps the records on file. Example records were provided for the dates 7-22-20 and 8-27-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE5, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 3.0 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 3.2 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE5 appeared to be at least 17.5 feet above the ground and having a maximum diameter no more than 29 inches.

EUBAGHOUSE6

This emission unit separates fines from the Baghouse #1 exhaust and routes them into the McConnell burner fuel storage bin.

SC III.1, VI.1

At the time of the inspection, Baghouse 6 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE6.

The facility performs daily visible emission observations on EUBAGHOUSE6 when it is in operation and keeps the records on file. Example records were provided for the dates 7-22-20 and 8-27-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE6, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 3.7 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 4.3 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE6 appeared to be at least 30 feet above the ground and having a maximum diameter no more than 10 inches.

EUBAGHOUSE8

This baghouse separates fines from the groover booth, which includes the trims saws, and the hammermill.

SC III.1, VI.1

At the time of the inspection, Baghouse 8 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE8.

The facility performs daily visible emission observations on EUBAGHOUSE8 when it is in operation and keeps the records on file. Example records were provided for the dates 7-22-20 and 8-27-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE8, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the

Magnehelic gauge was reading 4.0 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 1.6 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE8 appeared to be at least 38 feet above the ground and having a maximum diameter no more than 46 inches.

EUBAGHOUSE9

This baghouse separates fines for the fines recovery system.

SC III.1, VI.1

At the time of the inspection, Baghouse 9 was in operation. All duct work appeared to be intact with no leaks. A differential pressure gauge was installed and showing the baghouse was operating properly. The differential pressure data of the baghouse is also provided live and recorded to the main control program that can be accessed via computer. No visible emissions were observed from SVBAGHOUSE9.

The facility performs daily visible emission observations on EUBAGHOUSE9 when it is in operation and keeps the records on file. Example records were provided for the dates 7-22-20 and 8-27-20. No visible emissions were recorded.

In addition to the visible emission records for EUBAGHOUSE9, LP Newberry maintains a "Baghouse Preventative Maintenance Report" that provides date, time, Magnehelic gauge reading, if baghouse is operating properly, visible emissions observed, discharge from the baghouse, pulse filter clean, and a malfunction reporting area where shutdown time, startup time, baghouse number, along with the reason for malfunction and corrective action taken. Example reports were provided for the dates 7-22-20 and 8-27-20. The 7-22-20 report notes the Magnehelic gauge was reading 1.0 in. WC, baghouse was operating properly, no visible emissions were observed, and no discharge from the baghouse. The 8-27-20 report notes the Magnehelic gauge reading 2.6 in. WC, baghouse was operating properly, no visible emission observed, and no discharge from the baghouse.

SVIII.1

SVBAGHOUSE9 appeared to be at least 48 feet above the ground and having a maximum diameter no more than 24 inches.

FGCOLDCLEANERS

The facility operates a parts washer with stoddard solvent. At the time of the inspection, the cover was closed on the parts washer. There were instructions observed above the parts washer that state the cover must remain closed when the washer is not in use. There are also instructions that state parts shall be drained for no less than 15 seconds or until dripping ceases. While parts are being cleaned, emissions from the solvent being used are released to the general in-plant environment.

FGCIRICEMACT, FGSIRICEMACT, and FGRICEMACTNEW

LP Newberry has three emergency engines. EUDRYBACKUP is a spark ignition emergency engine to power the rotation mechanism of the dryer in the event the primary method is not available, EUTOHDIESEL is an emergency engine for the Konus thermal oil heaters, and EUFIREPUMP is an emergency fire pump engine. All three engines contain hours meters to record hours of operation. These three engines are subject to 40 CFR Part 63, Subpart ZZZZ. The AQD currently does not have delegated authority for area source MACT ZZZZ.

Compliance

Based on the inspection conducted and records reviewed, LP Newberry is currently in compliance with MI-ROP-N0780-2018a.

NAME Michael Miller

DATE 5/13/2021

SUPERVISOR ELL