

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

N594061220

FACILITY: POTLATCHDELTAIC LAND & LUMBER LLC.		SRN / ID: N5940
LOCATION: 650 A AVENUE, GWINN		DISTRICT: Marquette
CITY: GWINN		COUNTY: MARQUETTE
CONTACT: Amy Benson, Environmental Coordinator (2018)		ACTIVITY DATE: 12/15/2021
STAFF: Michael Conklin	COMPLIANCE STATUS:	SOURCE CLASS: MAJOR
SUBJECT: Targeted inspection for FY 22.		
RESOLVED COMPLAINTS:		

Facility: PotlatchDeltic Land & Lumber, LLC (SRN: N5940)

Location: 650 A. Avenue, Gwinn, Marquette County, MI 49841

Contact(s): Amy Benson, Environmental Coordinator, 906-346-8205

Facility Description

The Gwinn Lumber facility is one of PotlatchDeltic's six sawmills with a lumber production capacity of 220 million board feet per year (MMBf/yr). The facility is located at 650 Avenue A, Gwinn, MI, a flat rural area in Marquette County that is in attainment for all criteria pollutants. Gwinn Lumber was originally constructed in 1998 following the issuance of Permit to Install (PTI) No. 299-96. This stationary, automated mill processes softwood species of Jack Pine, Red Pine, Spruce, Balsam, White Pine, and Tamarack into dimensional lumber. Wood chips, sawdust, and waste material that is generated onsite are sold to off-site sources or burned in the wood-fired boilers.

Process Description

The mill process starts with green logs being debarked and sorted based on size. Logs entering the sawmill are considered "green" meaning they have a naturally higher moisture content than the final dry lumber product. The green logs are then laser scanned and rough cut into lumber by an automated saw. Rough cut lumber is stacked and enters one of four kilns for drying. After the lumber has reached the desired moisture content, the lumber is fed through a planer system that trims and edges the lumber into the final stud length. The lumber then passes through a machine that grades the lumber based on quality indicators. After the lumber is graded, it is sorted, bundled, and shipped to customers.

Emissions

Wood product manufacturing involves the generation of sawdust, planer shavings, and/or sander dust which contribute to levels of atmospheric PM and PM10. Cyclones or baghouses act as capture/collection systems for air pollution control and product recovery by separating wood

residue from the airstream of pneumatic handling systems. Volatile organic compounds (VOCs) are emitted during the kiln drying of wood.

PotlatchDeltic contains natural gas-fired equipment, including a boiler and burner for dry kiln #4. Pollutants emitted from the combustion of natural gas-fired equipment includes nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOCs), particulate matter (PM), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and trace amounts of sulfur dioxide. Higher temperatures of burning and longer residence time results in higher NOx emissions. 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.

The source also contains wood-fired boilers. Waste wood material is collected and used as fuel in the boilers to produce process heat. The waste wood residue could include bark, sawdust, shavings, chips, or wood trim. The primary pollutants emitted from wood-fired boilers include PM, CO, NOx, and VOCs. The incomplete combustion of the organic material causes the release of these pollutants. Mechanical collectors, such as multicyclones, and flyash reinjection can reduce PM emissions. Furnace design and operating conditions (air/fuel ratio) contribute to combustion efficiency that in turn affects the quantity of pollutants emitted.

Emissions Reporting

PotlatchDeltic 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 2020.

Pollutant	Emissions (TPY)
CO	43.96
Lead	0.0
NOx	51.7
PM10, FLTRBLE	29.64

PM10, PRIMARY	<1
PM2.5, FLTRBLE	27.9
PM2.5, PRIMARY	<1
SO2	4.86
VOC	132.4

Regulatory Analysis

PotlatchDeltic is subject to MI-ROP-N5940-2019a. The source is considered major for NOx, VOC, CO, and PM because the potential-to-emit (PTE) for these pollutants are over 100 tpy. The facility is considered a synthetic minor source for hazardous air pollutants (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. The source is considered minor for all other criteria pollutants.

EU-WOODBOILER1, EU-WOODBOILER2, and EU-GASBOILER at the stationary source are subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR Part 60, Subparts A and Dc. EU-GENERATOR at the stationary source is subject to the Standards of Performance for Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII. EU-WOODBOILER1, EU-WOODBOILER2, and EU-GASBOILER at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources promulgated in 40 CFR Part 63, Subparts A and JJJJJ. EU-FIREPUMP1, EU-FIREPUMP2, and EU-GENERATOR 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.

Compliance History

The facility was last inspected in July 2020 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 on-site inspection was conducted on 12/15/2021 to determine compliance with MI-ROP-N5940-2019a. Upon arrival, AQD met with Amy Benson (Environmental Coordinator), Dave Ruokolainen (Maintenance Manager), and Jim Pearson (Mill Manager). A discussion was had on the purpose of the inspection and whether there have been any changes to the facility. There have been no changes or plans to the facility that affect air emissions. After the pre-inspection meeting, AQD toured the facility inspecting the different emission units held in the ROP.

SOURCE-WIDE

PotlatchDeltic is considered an opt-out source for HAPs since the facility took source-wide limits to restrict the PTE to less than 9 tpy for individual HAPs and 24 tpy for total 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 total HAP emission calculations for each calendar month and on a 12 month rolling time period basis.

The facility supplied records that track monthly and 12-month rolling HAP emissions from the wood-fired boilers and kiln drying (SC VI.2). These emission units are the greatest sources of HAP and VOC emissions at the facility. The mill processes balsam, jack pine, red pine, and spruce wood species. With the combustion and drying of these wood species comes the release of HAPs in the form of VOCs. Some of the HAPs emitted, but not limited to, are acetaldehyde, acrolein, formaldehyde, methanol, and propionaldehyde.

Emission factors for kiln drying are in lb/MBF and are from the PCWP MACT, NCASI NPRI reports, and kiln performance tests conducted at PotlatchDeltic mills. The wood-fired boiler HAP emission factors are in lb/MMBtu and are from NCASI Technical Bulletin 858, Tables 20A and 20B. The potential-to-emit of all HAPs from each wood-fired boiler is 1.09 tpy and 2.18 tpy for both boilers combined. This is based on a maximum heat input capacity of 28.7 MMBtu/hr for each boiler operating 8760 hours per year. The potential-to-emit of all HAPs from kiln drying at the facility is 15.85 tpy, with the highest individual HAP being methanol at an emission rate of 13.62 tpy. This is based on a restricted red pine drying limit of 210,000,000 BF and total wood drying limit of 220,000,000 BF.

For the 12-month rolling period through November 2021, the records provided show all individual HAP emission rates to be less than 9 tpy based on a 12-month rolling basis. The methanol emission rate for a 12-month rolling time period basis stays consistent around 7.2 tpy each month (SC I.1). Total aggregate HAP emissions for a 12-month rolling time period basis stay consistent around 17 tpy each month (SC I.2).

The source is required to maintain a facility-wide Malfunction Abatement Plan (MAP) that includes a preventative maintenance program for the air pollution control devices at the mill. The plan includes preventative maintenance schedules and procedures, inventory of critical spare parts, monitored operating variables, corrective action procedures, recordkeeping, and reporting (SC IX.1).

A fugitive dust plan is maintained at the facility for material storage piles, material handling equipment, plant roadways, and the plant yard. Many of these areas apply to EU-PNEUMATICLINE where waste material is collected in a pile or container to be shipped off-site (SC IX.2).

EU-GASBOILER

The facility contains a natural gas-fired boiler for additional heating capacity to the wood-fired boilers. The boiler is a Cleaver Brooks with a rated heat input capacity of 48.8 MMBtu/hr and only burns natural gas (SC III.1). The facility keeps records of the amount of natural gas combusted during each calendar month. Records were provided for the period 04/01/2020 through 11/30/2021 (SC VI.1). For 2020, the boiler burned 101.37 MMCF. At the time of the inspection, the natural gas-fired boiler was operating. A natural gas line into the boiler was observed (SC III.1). No visible emissions from the stack were observed. No deviations were reported for EU-GASBOILER during 2020 and first semiannual period of 2021.

EU-PNEUMATICLINE

This emission unit is a material handling system that collects waste green chips from saws and conveys them through one of three blow lines. Each line is dedicated to either the chip pile, rail car, or truck bin. The truck bin line is equipped with a cyclone that allows the separation of wood chips from the air stream so that they can fall naturally into the truck bed. This prevents fugitive emissions that would likely occur from the higher-pressure blow line releasing into an open top container.

PotlatchDeltic has a fugitive dust plan for EU-PNEUMATICLINE (SC III.1). The plan includes requirements of keeping chips on an impervious surface, sweeping and maintaining the chip pile, visible emission checks, and corrective actions in the event of a malfunction.

SC III.2 requires truck bin loading to be restricted to less than 5,075 hours per year. With this limit, the facility is required to record the daily hours of operation. Records provided indicate an hour meter is used to track hours of truck bin loading. The truck bin is not used during the winter. Records provided show the 12-month rolling total through November 2021 to be 1,068 hours.

To-date, the AQD has not requested stack testing to verify PM emission rates from the EU-PNEUMATICLINE cyclone.

Non-certified visible emission checks on EU-PNEUMATICLINE are to occur daily (SC VI.2). Records of the non-certified visible emissions observations, the reason for any visible emissions observed, and any corrective actions shall be kept on file and made available upon request. PotlatchDeltic maintains records of visible emissions and leaks in the pipes of the pneumatic line during days of operation. For 2020, records indicate there were two visible emission events. The wig-wag is a curved piece of duct work with a nozzle on the end that is pointed downward and swung side-to-side as it's filling chips in the rail car. These leaks have been noted as deviations in the semi-annual and annual compliance reports. The facility has explained in the past that this occurs due to the conveyed material being abrasive and wears down the piping as it is conveyed at high velocity. It is known that particulate matter moving at high velocities can cause ductwork abrasion especially at areas with sharp shifts in direction such as elbows. The description of the incidents notes the blow line is shut down immediately upon detection and is repaired before returning to service (SC VI.2). For 2021, one visible emission event was documented on 10/21/2021.

During the inspection chips were being routed to the chip pile. A strong wind was blowing during observations of the chip pile that was causing some chips to be blown outwards from the pile. The drop height of the chips is high to compensate for the pile height that grows quickly when chips are being routed this way. The chips were falling about 40 feet from the main pile. No fugitive dust issues were observed.

EU-GENERATOR

This emission unit is a 389 HP diesel-fueled emergency engine with a manufacture year of 2013. A certificate of conformity with the Clean Air Act of 1990, for engine family DFPXL08.7TR3, is maintained on file. The facility also holds the manufacture certification of compliance with the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources (NSPS) 40 CFR Part 60, Subpart IIII. Generac, the manufacture of the engine, certifies the engine to meet 0.5 Grams/KW-hr for CO, 3.5 Grams/KW-hr for NOx + NMHC, and 0.13 Grams/KW-hr for PM (SC VI.1). These emission rates show compliance with the emission limitations outlined in SC I.1-3.

PotlatchDeltic also records the hours of operation during non-emergencies on a monthly and 12 month rolling time period basis. The 12-month rolling total hours of usage through November 2021 was 50.8. (SC VI.2).

Fuel supply records indicate the fuel is #2 ultra-low sulfur diesel (SC VI.3). Ultra-low sulfur diesel is required to have sulfur content less than 15 ppm (SC II.1). According to the 2020 MAERS report, the emergency engine burned 68 gallons of fuel oil.

During the inspection, the hour meter read 133.7 hours and the engine was not in operation.

FG-WOODBOILERS

EU-WOODBOILER1 and EU-WOODBOILER2 are both Hurst boilers, model number HYB-4000-150-WF, with a maximum heat input capacity of 28.7 MMBtu/hr and a steam flow rate of 20,700 lb/hr. Each boiler is equipped with multicyclones to control PM emissions (SC III.1 and IV.1). The boilers are fired primarily by waste wood residue (bark) that is generated on-site as a byproduct from lumber production. Collected wood waste is augured into the boilers via screw conveyor to provide continuous and uniform fuel feed.

Each boiler contains emission limits for benzo(a)pyrene, CO, and PM. Testing is required every five years to verify emission limits in pounds per MMBtu (lb/MMBtu) and pounds per hour (lb/hr) for CO and PM, and in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and lb/hr for benzo(a)pyrene. The boilers were last tested in February 2019 and were in compliance with the emission limits established in SC I.1, 2, 4, 5, 7, and 8 (SC V.1). Using equations from Appendix 7 in the ROP and emission factors from the most recent stack test, the facility is required to calculate and record CO, PM, and benzo(a)pyrene emissions in tons per year. Emission factors, from the 2019 stack test, that are used in the 12-month rolling calculations are outlined in the table below.

Pollutant	Boiler 1	Boiler 2	Units
CO	0.26	0.11	lbs/MMBtu
PM	0.15	0.14	lbs/MMBtu
Benzo(a)pyrene	6.00E-06	6.00E-6	lbs/hr

The boilers contain material limits of not burning painted or treated wood, and no more than 2 gallons per hour of spilled waste fuels including oil, hydraulic fluid, antifreeze, and spent boiler chemicals. These waste fuels are only allowed to be burned from the collection of on-site spill cleanups and floor sweeps. PotlatchDeltic is required to keep records of the type and amount of waste fuels burned in the boilers. Records provided show a total of 3 dates where lube oil and

hydraulic oil were burned in the boilers. Both boilers share a fuel room so burn rates are split among boilers. During the days that these waste fuels were burned, the burn rates were all less than 2.0 gal/hr (SC II.3 and VI.1). The burn rate of the waste fuels is calculated by dividing the amount of waste fuel (gal) by the time it takes to clear the fuel room based on the current depth of the fuel in the room at that time of waste fuel added. The overall fuel use rate is based on 2010 fuel usage data, where total fuel use for the year was 40,233 tons and both boilers operated 356 days. This equates to a fuel use rate of 113 tons/day.

Records of the amount of wood fuel burned each month are to be maintained. The facility tracks fuel usage daily for each boiler and sums a given month usage up at the end. A YTD value is maintained throughout the year. As of November 2021, the YTD total for FGBOILERS was 33,643 tons of fuel burned. (SC VI.2).

Multiplying the fuel heating value (10.13 MMBtu/ton, from fuel analysis of 2019 stack test) with the given pollutant emission factor and the monthly fuel usage for a given boiler, the source calculates and records the monthly emissions. A 12-month time period is summed to show a ton per year value. The records provided show the source is in compliance with the emission limits contained in SC I.3, 6, and 9.

The wood-fired boilers are required to have installed primary and secondary multicyclones (SC IV.1). A multicyclone is a type of mechanical collector that uses centrifugal force to control PM emissions by collecting fly ash particles from the flue gas before being emitted to the atmosphere. A differential pressure gauge is required to be installed across each multicyclone to monitor the performance of the control device. The facility is required to record the differential pressure across the multicyclones once per shift. Records were supplied showing the multicyclone differential pressure being recorded twice per day during operation. The facility operates two shifts per day: day and night shift. The static pressure is recorded before and after each multicyclone for each boiler. The difference between the inlet and outlet pressure of the multicyclone provides the differential pressure. If the differential pressure is less than -3 or greater than 3 in. WC, personnel are supposed to immediately notify supervisor and the maintenance department. From records provided, the differential pressure appears to be staying within the optimal range of greater than -3 and less than 3 in. WC (SC VI.4).

Records of the most recent boiler tune-up reports were provided. A tune-up for Boiler #1 was conducted on 09/28/2021. The CO readings before and after were 83 ppmv and 31 ppmv. The inspector noted the overfire air dampers were adjusted. A tune-up for Boiler #2 was conducted on 09/29/2021. The CO readings before and after were 84 ppmv and 29 ppmv. The inspector noted the overfire air dampers were adjusted.

EU-WOODBOILER1 and EU-WOODBOILER2 were both operating and producing steam during the inspection. Boiler #1 was running at a steam production rate of 15,000 lb/hr and Boiler #2 was running at a steam production rate of 12,000 lb/hr. Bark from processed logs was observed in the fuel bin (SC II.1). The multicyclones for each boiler were operating to control PM emissions (SC IV.1). The inlet to the multicyclone for Boiler#1 was reading 0.10 inHg and the outlet was reading 0.61 inHg for a differential pressure of -0.51 inHg. The inlet to the multicyclone for Boiler#2 was reading 0.21 inHg and the outlet was reading 0.79 inHg for a differential pressure of -0.58 inHg. No visible emissions were observed from the stacks of FG-WOODBOILERS.

FG-DRYKILNS

Rough green lumber is transported to one of four dry kilns after being cut to final stud length. Kilns 1-3 are indirect heated by steam, while kiln 4 is direct heated by a natural gas burner. Wood species dried in the kilns include jack pine, red pine, spruce, balsam, and insignificant amounts of white pine and tamarack. This flexible group contains a VOC emission limit of 176.8 tpy, and two material limits of no more than 210,000,000 BF/yr of red pine dried and 220,000,000 BF/yr of total wood dried.

The facility is required to track the type and amount of each wood species dried per calendar month and on a 12-month rolling time period basis in FG-DRYKILNS. Records provided show the amount and type of each wood species dried in each kiln per month and on a 12-month rolling basis. Through November 2021, the 12-month rolling total of Jack Pine is 19,370,483 BF, 138,991,319 BF of red pine, 23,828,979 BF of spruce, and 3,171,375 BF of Balsam were dried (SC II.1 and VI.2). This equates to a 12-month rolling total of 185,362,156 BF/yr dried in FG-DRYKILNS (SC II.2).

VOC mass emission calculations are also required on a monthly and 12-month rolling basis for FG-DRYKILNS. The facility is required to provide the VOC emission factor (in lbs carbon per amount of board feet) for each wood species dried. The table below outlines the emission factors the source uses to calculate VOC mass emissions from lumber dried. These emission factors were results from the June 2014 kiln performance tests.

VOC EF, lb C/MBF	Jack Pine	Red Pine	Spruce	Balsam
EF	1.26	1.47	1.15	0.60

Monthly VOC emissions from FG-DRYKILNS are calculated using the formula below.

$(\text{Jack Pine BF/Month} * 1/1000 * 1.26 \text{ lbs C/MBF}) + (\text{Red Pine BF/Month} * 1/1000 * 1.47 \text{ lbs C/MBF}) + (\text{Spruce BF/Month} * 1/1000 * 1.15 \text{ lbs}) + (\text{Spruce BF/Month} * 1/1000 * 0.60 \text{ lbs C/MBF}) = \text{VOC lb C/Month}$

The monthly VOC emissions are summed over a 12-month period. Through November 2021, the 12-month rolling VOC emissions total from FG-DRYKILNS were 129 tons (SC I.1).

FG-PLANERSYSTEM

After rough green lumber is kiln dried, the rough-dried lumber is dimensioned with a high-speed planer and three end trimmers. Shavings are loaded into semi-truck trailers and trucked off site. The emission limitations for PM from FG-PLANERSYSTEM are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR Part 64. This flexible group has a control device and potential pre-control emissions of PM greater than the major source threshold level. The emissions units EU-PLANER, EUENDTRIMMER1, EU-ENDTRIMMER2, EU-ENDTRIMMER3, EU-TRAILERS make up FGPLANERSYSTEM and exhaust out a single point from a baghouse. Baghouses act as capture/collection systems for air pollution control and product recovery by separating wood residue from the airstream of pneumatic handling systems.

The planer system is not allowed to operate unless the baghouse is installed, maintained, and operating properly (SC IV.1). A differential pressure gauge is required to be installed to monitor the performance of the baghouse (SC IV.2). The differential pressure across the baghouse is required to be maintained at 0.1 to 6.0 in. WC. This differential pressure range was established during the March 2014 performance test on the baghouse and is correlated to PM emissions. The indicator range of 0.1 to 6.0 in. WC ensures compliance with PM emissions. In addition to monitoring the differential pressure across the baghouse, PotlatchDeltic is required to perform non-certified visible emission observations on the baghouse once per calendar month.

Records were provided of monthly visible emission observations for the period April 2020 through November 2021. The records included the date, time, name of observer, whether the reader is certified, and the status of visible emissions. From the records provided, there were no visible emissions observed from FG-PLANERSYSTEM for this time period.

The differential pressure across the baghouse is to be recorded once per day during operation. Records provided show the differential pressure being recorded during each day of operations. The exhaust from the baghouse is also inspected, along with checks on the pulse jet to make sure cleaning of the baghouse is operating properly (SC VI.3).

Monthly inspection and maintenance logs were provided for the baghouse in FG-PLANERSYSREM. The tube sheet (clean side) is inspected for dust accumulations, along with rips or loose seals. Each inspection section of the baghouse is graded on a "Good", "Fair", or "Poor" basis. Notes are provided if parts are replaced.

PotlatchDeltic has been prompt and complete in submitting semiannual CAM downtime incident summary reports and excursion/exceedance summary reports. There were no exceedances/excursions and downtime incidents during 2021 (SC VII.4 and 5).

During the inspection, the baghouse was inspected for leaks and malfunction. There were no leaks in the duct work and the baghouse appeared to be operating properly. The Magnehelic gauge was inspected for the differential pressure across the baghouse (SC IV.2). The gauge read 0.3 inches of water at the time of inspection (SC III.1). A differential pressure of 0.3 inches of water indicates the baghouse compressor is operating properly by cleaning the bags regularly and not allowing too much buildup of material. With no visible emissions observed from the baghouse and the differential pressure gauge reading above 0.1 inches of water, the bags inside seem to be in satisfactory condition (SC IV.1).

FG-FIREPUMPS

The facility contains two 231 HP compression ignition (CI) fire pump engines for emergency situations. These engines are subject to 40 CFR Part 63, Subpart ZZZZ. Both engines are equipped with a non-resettable hour meter (SC IV.1). From the 2020 MAERS report, EU-FIREPUMP1 operated a total of 13.5 hours and EU-FIREPUMP2 operated for a total of 7.2 hours. These hours were for maintenance and readiness testing. The engines burned a combined 103.13 gallons of fuel oil. During the inspection, the hours of EU-FIREPUMP1 were 44.7 and 24.4 for EU-FIREPUMP2.

Miscellaneous

The facility considers the following equipment exempt from permitting.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-PARTSWASHER	Four parts washers with air/vapor	R 336.1212(4)(b)	R 336.1281(2)(h)

	interface of less than 10 square feet		
EU-GASOLINETANK	500-gallon gasoline tank, vented to atmosphere	R 336.1212(4)(c)	R 336.1284(2)(g)
EU-SAWFILE	Saw filing system with dust collector/filtration system	R 336.1212(4)(d)	R336.1285(2)(I)(vi)
EU-KILN4BURNER	20 MMBtu/hr natural gas-fired burner for Kiln 4	R 336.1212(4)(i)	R 336.1291(2)

There are no additions or modifications planned for the facility.

Compliance

All air pollution control equipment appeared to be operated and maintained appropriately. Proper equipment operation, inspections, and preventative maintenance guidelines are being utilized. There were no signs of malfunctioning equipment. The facility appears to be following all conditions stated in their Malfunction Abatement Plan.

Based on the inspection and records reviewed, PotlatchDeltic appears to be in compliance with MI-ROP-N5940-2019a.

NAME Michael Deltic

DATE 1-14-2022

SUPERVISOR EJL