

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

A647556665

FACILITY: UP Paper LLC.		SRN / ID: A6475
LOCATION: 402 West Elk Street, MANISTIQUE		DISTRICT: Marquette
CITY: MANISTIQUE		COUNTY: SCHOOLCRAFT
CONTACT: MARK OZOGA , ENVIRONMENTAL MANAGER		ACTIVITY DATE: 12/17/2020
STAFF: Joe Scanlan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Announced inspection to determine compliance with MI-ROP-A6475-2019		
RESOLVED COMPLAINTS:		

**SOURCE DESCRIPTION:** UP Paper recycles newsprint and produces specialty food-grade paper products. The facility is in the center of the City of Manistique in a historically industrial district, however there are residential homes directly across the streets bordering the facility to the west and north. The paper mill borders the Manistique River to the east and to the south are two diesel electrical generation units owned and operated by Cloverland Electric. The facility shut down March 25, 2015 and was purchased and reopened June 15, 2016.

**REGULATORY ANALYSIS:** Equipment permitted under MI-ROP-A6475-2019 includes a natural gas fired boiler rated at 186.8 MMBtu/hr used for steam production (EUBLR004), a paper dyeing process (EUDYE001), Process Chemicals used to make paper products (EUPROCESS), and a 99 MMBtu/hr natural gas package boiler (EUBLR003) brought onsite when EUBLR004 is down. There are two original coal fired boilers still on site which have been decommissioned.

When the coal fired boilers were in operation, the stationary source was subject to 40 CFR Part 70 because the potential to emit (PTE) of CO, NO<sub>x</sub> and SO<sub>2</sub> each exceeded 100 tpy. Additionally, the PTE of any single HAP regulated by the federal Clean Air Act, Section 112, was equal to or more than 10 tpy and/or the PTE of all HAPs combined was more than 25 tpy and the PTE of Greenhouse Gases was 100,000 tpy or more calculated as CO<sub>2</sub> equivalents (CO<sub>2</sub>e) and 100 tpy or more on a mass basis.

Since installing the natural gas boiler and decommissioning the coal fired boilers the facility has significantly decreased their PTE for all the pollutants mentioned above. The facility submitted an ROP renewal application in March 2019. Because new equipment had been added and removed staff requested new PTE calculations. Revised PTE calculations show the facility is below the Part 70 thresholds, however the facility maintains their ROP.

**INSPECTION:** On 12/17/2020 I arrived at UP Paper and met with Mr. Mark Ozoga, Environmental Manager. Mr. Ozoga gave me a site tour and explained the processes covered by the ROP. After the tour, we met with the stack testing field technician from Montrose on site for the annual RATA. Testing was in progress and is discussed under EUBLR004 below.

Below is a description and summary of compliance for each emission unit covered by MI-ROP-A6475-2014 and other applicable federal air quality regulations:

#### EUBLR003

**Description:** 99 MMBtu Boiler fired on natural gas and No. 2 fuel oil. This is a portable boiler brought onsite only when EUBLR004 is down. The facility has not brought a portable boiler onsite since 2012.

**Emission Limits (SC I. 1-5):**

<b>Pollutant</b>	<b>Limit(s)</b>	<b>Actual/Compliance Demonstration</b>
NOx	14.35 pph	UP Paper has not operated EUBLR003 in 9 years. There are no current emission records for this unit
	26.4 tpy	
SO2	50.94 pph	
	27.8 tpy	
PM	0.1 lbs/1000 lbs exhaust gas	

**Design Equipment Parameters (SC II. 1-4; SC III. 1; SC IV. 1-2)**

EUBLR003 is limited to 775,000 gallons per year of No. 2 fuel oil, there has been 0 gallons of fuel oil burned in the last 5 years. This boiler is also limited to 867,240 MMBtu/year of heat input, the heat input for EUBLR003 is 0 MMBtu/year for the last 5 years. The next time this boiler is operated (brought onsite) the sulfur content of the fuel must remain below 0.5 % by weight.

The package boiler brought onsite under EUBLR003 shall not exceed a heat input capacity of 99 MMBtu/hr. The facility is aware if they need a larger boiler in the future they will need to apply for a new permit.

**Testing/Sampling/ Monitoring and Record Keeping (SC V. 1; SC VI. 1-5)**

AQD has the authority to request emissions testing for NOx, SO2, and PM from EUBLR003. Monthly fuel use records, heat input calculations, and NOx and SO2 emission records shall be kept monthly, any time the boiler is operated.

**Reporting (SC VII 1-3)**

Prompt reporting of deviations is required for EUBLR003. Semiannual and Annual compliance certifications should be submitted by March 15 and September 15 each year.

**Other Requirements (SC IX. 1-2):** This facility is subject to New Source Performance Standard (NSPS) 40 CFR Part 60, Subparts A & Dc). The facility has a fuel oil sulfur limit and required record keeping covered in this permit to verify SO2 emission limits are met.

**EYDYE001**

**Description:** Paper Dyeing process. This process has not operated since 2014.

**Emission Limits (SC I. 1-2):**

Pollutant	Limit	Actual/Compliance Verification
VOCs	9.1 pph	UP Paper has not operated EUDYE001 since 2014. They do not have emission records since then.
VOCs	26.7 tpy	

#### Process Operational Restrictions/Monitoring and Record Keeping (SC III. 1; SC VI. 1-3)

UP Paper maintains tank covers on each dyeing unit. They don't have plans to use this system, but they will keep it permitted for future orders that may require it. The facility maintains records for VOC contents and usage rates of each dye and VOC emission calculations when this process is operated.

#### Reporting (SC VII. 1-3)

Prompt reporting of deviations is required for EUDYE001. Semiannual and Annual compliance certifications should be submitted by March 15 and September 15 each year.

#### EUPROCESS

Description: Paper manufacturing process chemical use.

#### Emission Limits (SC I. 1-3)

Pollutant	Limit	Actual/Compliance Verification
VOC	82.3 tpy	11.59 tpy (PTE January 2019)
VOC (Kerosene)	349 lbs (kerosene per 8 hr shift)	0 lbs the facility no longer uses kerosene onsite
VOC (Petroleum Distillates)	18.72 tpy (petroleum distillates)	0 tpy the facility no longer uses petroleum distillates in this process

#### Monitoring/Record Keeping (SC VI. 1-2)

The facility records usage rates and calculates VOC emissions for all chemicals used in EUPROCESS. VOC records are attached to the hard file of this report.

#### Reporting (SC VI. 1-3)

Prompt reporting of deviations is required for EUPROCESS. Semiannual and Annual compliance certifications should be submitted by March 15 and September 15 each year.

#### EUBLR004

**Description:** Natural Gas fired boiler rated at 186.8 MMBtu/hr for steam production. The boiler is equipped with low NOx burners and flue gas recirculation.

**Emission Limits (SC I. 1-2):** (records attached to the hard file of this report)

Pollutant	Emission Limit	Actual/Compliance Verification
NOx	0.20 lb/MMBtu (30-day average)	December 2020: 0.039 lb/MMBtu
GHGs as CO <sub>2</sub> e	74,975 tpy (12 month rolling time period as determined at the end of each calendar month)	December 2020: 52,416

#### Material Limit (SC II. 1-2)

The facility uses only pipeline quality natural gas and does not exceed 1,247 MMcf per 12 month rolling time period. Natural Gas usage records are attached to the copy file of this report. At the end of December 2020 the 12-month rolling time period usage was 967.9 MMcf.

#### Process/Operational Restrictions (SC III 1-2):

The facility shall not operate EUBLR004 unless a Malfunction Abatement Plan (MAP) is implemented and maintained. The MAP was last updated in October of 2016 and meets the minimum specifications as outlined in this section of the ROP.

Per SC III.2 the facility only burns pipeline-quality natural gas

#### Design/Equipment Parameters (SC IV. 1-4):

The maximum design heat input capacity of the boiler is 186.7 MMBtu/hr. The low NOx burners are maintained and operated properly, and the facility operates a Predictive Emission Monitoring System (PEMS) to monitor and record NOx emissions.

#### Monitoring/ Record Keeping (SC VI. 1-8):

UP Paper operates a PEMS to verify NOx emission rates. They perform an annual RATA test to verify system accuracy. The most recent test for NOx lb/MMBtu was conducted on 12/17/2020 by Montrose Air Quality Services (Shane Rabideau, Field Technician). AQD district staff Joseph Scanlan was present during the test to monitor boiler operating parameters (nat. gas flow/heat input/steam flow). Operating parameters were consistent throughout testing (see attached files).

The source test report from Montrose was received 2/02/2021 with acceptable results (see Tables 4-1, 4-2, & 4-3 of the test report).

The facility submits quarterly PEMS reports. The last report was received January 27, 2021. No deviations have been reported the last two quarters of 2020. The facility keeps monthly natural gas usage records and maintains monthly and 12 month rolling time period records of the annual capacity factor for natural gas. The 12-month rolling average was 0.53 tpy in December 2020. UP Paper maintains monthly and 12 month rolling time period records for CO<sub>2</sub>e emissions. December 2020 CO<sub>2</sub>e emissions were 4936 tons (monthly) and 52,416 tpy (12 month rolling time).

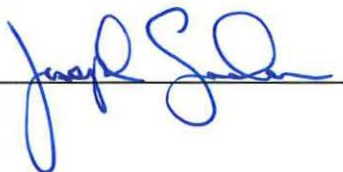
#### Reporting (SC VII. 1-6)

Prompt reporting of deviations is required for EUBLR004. Semiannual and Annual compliance certifications should be submitted by March 15 and September 15 each year. No deviations/excess emissions were reported for 2020. The facility sent a written notification of initial startup of EUBLR004 on 03/04/2015, the boiler was initially started 02/19/2014.

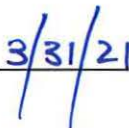
#### Compliance Determination:

At the time of my inspection it appeared UP Paper was following the requirements of MI-ROP-A6475-2019 and all applicable state and federal air quality regulations. It should be noted there were multiple odor complaints from a single complainant during the later half of 2020. These complaints were investigated by local government officials and district EGLE staff (see 10/13/2020 Complaint Investigation report in MACES). There was no conclusive evidence UP Paper was the source of the odors.

NAME



DATE



SUPERVISOR

