Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-25-013
Domtar Paper Company, LLC
Hawesville, KY 42348-0130
March 10, 2025
Brian Harley, Reviewer

SOURCE ID:	21-091-00005
AGENCY INTEREST:	43431
ACTIVITY:	APE20190001, APE20210002, APE20230001

Table of Contents

SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 2611, 2621, Pulp Mills (pulp mills producing paper except newsprint), Paper Mills (except newsprint mills)

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☐ Yes ☒ No If Yes, See Section 4, Table A

28 Source Category ☒ Yes ☐ No If Yes, Category: Kraft pulp mills, Fossil-fuel boilers, or combination of fossil-fuel boilers, totaling more than 250 million BTUs per hour heat input

County: Hancock
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☒ PM_{10} ☒ $PM_{2.5}$ ☒ CO ☒ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☒ Yes ☐ No
If yes, for what pollutant(s)?
☒ PM_{10} ☒ $PM_{2.5}$ ☒ CO ☒ NO_X ☐ SO_2 ☒ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☒ Yes ☐ No
If yes, list which pollutant(s): HCl, Methanol

PTE* greater than 25 tpy for combined HAP ☒ Yes ☐ No

*PTE does not include self-imposed emission limitations.

Description of Facility:
The facility is an integrated pulp and paper mill utilizing the kraft process for the manufacturing of bleached pulp from wood chips. The plant consists of two areas: the Bleach Pulp Mill (BPM) and the Fine Paper Mill (FPM).

Hardwood chips and a small portion of softwood are received at the BPM via truck, barge, and rail car. The chips are screened, then sent to a continuous digester in the pulp mill which cooks the chips into pulp. The pulp is then screened and washed, then transferred to a high density storage tank. The pulp is bleached, then stored in high-density storage vessels. From this point, the pulp is either processed into sheets that are baled and dried to be sold as Market Pulp or transferred to the FPM to be used in the manufacture of paper.

The pulp is transferred to one of two paper machines at the FPM. Various chemicals and dyes are added to the paper to form different types of specialty paper. Sheet is formed on the Fourdrinier wire, and then dried by steam heated dryers to produce the final product.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-25-013

Activities	Received Date	Application Complete Date
APE20190001	June 7, 2019	June 27, 2019
APE20210002	June 22, 2021	March 13, 2023
APE20230001	March 13, 2023	May 6, 2024

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☒ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐Yes ☒No NSR Applicable? ☐Yes ☒No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☒Yes ☐No

Description of Action:

APE20180005
502(b)(10) Change — The Division received the Domtar Paper Company, LLC. application for the addition of a mist elimination system to the control device for emission unit EU-30, BPM Smelt Tank No. 4 on August 15, 2018. The addition of the mist elimination system was added to improve the capture of liquid from this emission unit, which also improves the capture of suspended solids.

APE20190001
Minor Revision — The Division received the Domtar Paper Company, LLC. application to replace the generating bank for emission unit EU-27, BPM Recovery Boiler Furnace no. 3 on June 7, 2019. In addition, language in the permit requiring annual boiler tune-ups for emission unit EU-59, BPM Backup Boiler, was changed to every five years based on knowledge that the boiler has oxygen trim. It has been demonstrated that the increase in actual emissions associated with the replacement of the generating bank at EU-27 will not exceed any significant emission rates as defined in 401 KAR 51:001. The results are as follows:

PSD Criteria Pollutant	NO_X	CO	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO_2e
Emissions (tpy)	24	43.7	8.7	7.1	4.8	--	2.5	59,447
PSD SER (tpy)	40	100	25	15	10	40	40	75,000
Further PSD Review	No	No	No	No	No	No	No	No

APE20200001
502(b)(10) Change — The Division received the Domtar Paper Company, LLC. application for the temporary use of a portable rental chip rejects grinder on September 22, 2020. The temporary grinder uses a 950 hp diesel engine with a fuel capacity of 47.5 gal/hr which will be in place for no more than 8 weeks. Furthermore, 8,000 tons per year or 25 tons per hour of wood would be processed based on 8 hours per day, 5 days per week, 8 weeks of operation. The Division has determined that the temporary grinder can be covered by a 502(b)(10) Change, however it will not be added to the permit.

APE20200002
502(b)(10) Change

The Division received the Domtar Paper Company, LLC. application for the installation of a portable residuals mixer with integral 92.6 kW, 124 hp diesel-fired engine. The EPA certified engine will not stay in any location at the facility for more than 12 consecutive months and will therefore be classified as a nonroad engine. For this reason, the engine will not be subject to 401 KAR 63, Subpart ZZZZ or 40 CFR 60, Subpart IIII and will only be subject to 401 KAR 63:020. Pursuant to an email received by the facility on April 28, 2025, the residuals mixer has been removed from the facility and will not be brought back on-site.

APE20210002
Minor Revision

The Division received the Domtar Paper Company, LLC. application for the addition of a propane-fired emergency generator engine and to revise the requirements for the BPM Bio-Fuel Boiler (EU-42) on June 22, 2021. The spark ignition emergency engine was manufactured on June 24, 2019 and is subject to 40 CFR 60, Subpart JJJJ and has associated propane tank which will be added as an insignificant activity. EU-42 has historically been permitted as requiring annual tune-ups pursuant to 40 CFR 63, Subpart DDDD. However, the boiler is equipped with an oxygen trim system that allows for an optimized air to fuel ratio. Therefore, the permittee has requested that the requirements from 40 CFR 63, Subpart DDDDD be revised to reflect 5-year tun-ups as allowed by 40 CFR 63, Subpart DDDDD. There are no change in emissions due to the revised requirements for EU-42 and the emissions from the new 11 kW emergency engine have been added to the facility's total emissions.

APE20230001
Renewal

The Division received the Domtar Paper Company, LLC. application for the renewal of their Title V permit on March 13, 2023. In the renewal application, the facility requested that the following items be addressed:

- Acceptable ranges of scrubber parameters for EU-28 – Smelt Tank No. 3 have been updated based on performance testing performed on March 20, 2019.
- Acceptable ranges of scrubber parameters for EU-30 – Smelt Tank No. 4 have been updated based on performance testing performed on March 12, 2019.
- Regulatory language pertaining to emission units EU-19, EU-20, and EU-21; No. 2 and 3 Bleach Plants and ClO_2 Generator; have been updated in the permit based on language from 40 CFR 63, Subpart S. Specifically, submittal of LDAR reports as required by **6. Specific Reporting Requirements** c in previous permits has been removed as the required reporting under 40 CFR 63.455 is required to be reported via the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) as specified in 40 CFR 63.455(h).
- The following insignificant activities have been removed from the permit:
  - KMM chip preparation-ceased operation
  - KMM HO screen conveyor fan- ceased operation

- KMM Recycle pulp area-ceased operation
- KMM condensate
- KMM mineral spirits tank- ceased operation
- KMM sulfite storage hopper- ceased operation
- Biospan methane generator- ceased operation

- The visual observation requirement for EU-54 has been revised to allow for weekly observations after six months of no visual observations on a daily basis. This language is the same as that for EU-33 and EU-37. It has also been added that this observation would be during truck/railcar unloading as this would be when emissions would occur.
- CAM requirements for EU-28 and EU-30 in Section D of the permit have been updated based on the performance tests performed on March 20 and 12, 2019.
- Several typographical errors have been corrected.
- 40 CFR 63, Subpart MM was revised and finalized on November 5, 2020 to include alternative scrubber fan amperage or revolutions per minute. The alternative only applies to dynamic scrubbers that operate at ambient pressure. Therefore, it applies to EU-30 which operates at ambient pressure, but does not apply to EU-28 which operates at s -7.45 inches of water.
- Revisions to the permit have been made pursuant to revisions to 40 CFR 63, Subpart DDDDD which were finalized on December 5, 2022.

Additionally, the applicability of 401 KAR 59:015 (Startup-Shutdown requirements) was added to the recovery boilers (EU-27 and EU-29) at the facility and the applicability of 401 KAR 51:160 and 401 KAR 51:220 were added to the backup boiler (EU-59).

APE20230002
Off-Permit Change

The Division received the Domtar Paper Company, LLC. application to install and operate new equipment at the facility to produce stretchable paper on August 17, 2023. To facilitate production of the stretchable paper (EAPP), the facility will modify the EU-51 K-1 (H-1) Paper Machine by modifying the mechanical layout of the Paper Machine without additional raw material, pup or paper production, chemical input, steam input, or additional combustions sources. Additional emissions will only occur from hand operated griding resulting in small amounts of particulate matter. The grinding operation (Blanket Grinding) will be an insignificant activity.

Additionally, the facility will be changing the identifying names to several pieces of equipment at the facility as follows:

- EU-51 from K-1 to H-1
- EU-52 from K-2 to H-2
- EU-53 from K-1 & 2 to H-1 & 2
- EU-54 from K-1 & 2 to H-1 & 2
- A58-09 from FPM K-2 to FPM H-2

Insignificant Activities

- K-1 Machine Stock Preparation Tank to H-1 Machine Stock Preparation Tank
- K-1 Machine Chemical Preparation to H-1 Machine Chemical Preparation
- K-2 Machine Chemical Preparation to H-2 Machine Chemical Preparation

The Manufacturer for emission unit A58-8 has been corrected to Cummins from Caterpillar.

APE20240002
Off-Permit Change

The Division received the Domtar Paper Company, LLC. application for the demolition of buildings, storage tanks, pipelines, and steel structures associated with the Corrugated Media Mill at the facility on May 10, 2024. The emissions of particulate matter from paved roadways, wind erosion of waste material storage, and waste material handling, during the 6 to 12 months of demolition, were estimated to be below 5 tons per year. However, no permit change based on regulatory requirements has been made to the permit.

V-25-013 Emission Summary		
Pollutant	2023 Actual (tpy)	PTE V-25-013 (tpy)
CO	715.43	1,098.18
NO_X	1,152.15	1,817.02
PT	280.10	383.45 (27,393)
PM_{10}	234.13	310.11 (26,085)
$PM_{2.5}$	165.20	218.26 (19,132)
SO_2	36.59	88.97 (729)
VOC	286.11	399.53 (559)
Lead	0.031	0.044
Greenhouse Gases (GHGs)		
Carbon Dioxide	1,465,203	2,624,410
Methane (GWP: 28)	442.76	576.4
Nitrous Oxide (GWP: 265)	69.48	87.4
CO_2 Equivalent (CO_2e)	1,496,013	2,663,717
Hazardous Air Pollutants (HAPs)/Toxic Air Pollutants (TAP)		
1,2,4-Trichlorobenzene	1.763	2.233
Acetaldehyde	6.017	8.476
Acetophenone	5.035	6.457
Acrolein	1.005	1.431
Barium (Total and Dissolved) (TAP)	0.505	0.736
Benzene	1.380	1.985
Carbon Disulfide	0.734	0.950
Chlorine	0.699	0.931
Chloroform	3.852	5.144
Cresol	2.253	4.175
Cumene	6.469	8.554
Dichloromethane	1.522	2.189
Formaldehyde	5.750	7.562
Hexachlorocyclopentadiene	1.409	2.709
Hexane; N-Hexane	1.031	1.495
Hydrochloric Acid	36.081	44.796
Methanol	192.794	259.147
Methyl Isobutyl Ketone	0.541	0.729
Naphthalene	1.147	1.581
n-Methyl-n-Ethylnitrosamine (TAP)	48.202	54.114
Phenol	5.760	7.603
Phosphorus (as P), Total	0.320	0.505
Styrene	0.468	0.672
Toluene	0.573	0.782
Total Reduced Sulfur (TAP)	14.051	22.925 (50.21)
Xylenes (Total)	5.185	7.224
Combined HAPs:	283.413	380.219 (425.83)

(--) Uncontrolled Emissions

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit EU-10 KMM Gasoline Storage Tank
Emission Unit EU-47 BPM Gasoline Storage Tank

Initial Construction Date: 12/1989

Process Description:

Emission Unit EU-10 KMM Gasoline Storage Tank	
Emission Point	C-80
Description	Gasoline storage tank
Maximum Rated Capacity/Throughput	1000 gallons storage capacity, 10^5 gallons/year
Process Description	Gasoline storage tank for KMM
Control Equipment	None

Emission Unit EU-47 BPM Gasoline Storage Tank	
Emission Point	B - 1400
Description	Gasoline storage tank
Maximum Rated Capacity/Throughput	1000 gallons storage capacity, 10^5 gallons/year
Purpose	Gasoline storage tank for vehicles.
Control Equipment	None

Applicable Regulation:
401 KAR 59:050, *New storage vessels for petroleum liquids*.

Comments:
The Division has determined that the following regulations do not apply to EU-10 and EU-47:
401 KAR 60:005, Section 2(2)(p), 40 C.F.R. 60.110 through 60.113 (**Subpart K**), *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.*

401 KAR 60:005, Section 2(2)(q), 40 C.F.R. 60.110a through 60.115a (**Subpart Ka**), *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.*

401 KAR 60:005 Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (**Subpart Kb**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023* is not applicable since the capacity is not equal to or greater than 75 m3 (19,812 gallons).

40 CFR 60, Subpart Kc, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023* is not applicable since the units were constructed before October 4, 2023.

401 KAR 60:005, Section 2(2)(eee), 40 C.F.R. 60.500 through 60.506 (**Subpart XX**), *Standards of Performance for Bulk Gasoline Terminals* is not applicable as the gasoline dispensing facility is not located at a bulk gasoline terminal.

Emission Unit EU-10 KMM Gasoline Storage Tank
Emission Unit EU-47 BPM Gasoline Storage Tank

401 KAR 61:050, *Existing Storage Vessels for Petroleum Liquids* is not applicable since this affected facility was commenced after April 9, 1972.

401 KAR 63:002, Section 2(4)(k), 40 C.F.R. 63.420 through 63.429, Table 1 (**Subpart R**), *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)* is not applicable as the tanks do not satisfy the applicability requirement specified in 40 CFR 63.420.

401 KAR 63:002, Section 2(4)(ccccc), 40 C.F.R. 63.11080 through 63.11100, Tables 1 through 3 (**Subpart BBBBBB**), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities* is not applicable because the source is a major source of hazardous air pollutants.

401 KAR 63:002, Section 2(4)(ddddd), 40 C.F.R. 63.11110 through 63.11132, Tables 1 through 3 (**Subpart CCCCCC**), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities* is not applicable because the source is a major source of hazardous air pollutants.

1000 gallon capacity. 100,000 gallon throughput per year. No controls. The permittee shall maintain tank diagrams/blueprints to verify the existence of the submerged fill pipe.

Emission Unit EU-11 Unpaved Mill Roads
Emission Unit EU-12 Paved Mill Roads

Initial Construction Date: EU-11: 1/2001; EU-12: 4/1967

Process Description:

Emission Unit EU-11 Unpaved Mill Roads	
Emission Point	C-90
Description	Unpaved plant roads
Maximum Rated Capacity	66,000 wood chip trucks and 14,000 wood fuel trucks on 0.4 miles round trip on unpaved roads
Process Description	Unpaved roads for movement of machinery for wood chip and wood fuel handling.

Emission Unit EU-12 Paved Mill Roads	
Emission Point	C-100
Description	Paved plant roads
Maximum Rated Capacity	66,000 wood chip trucks and 14,000 wood fuel trucks on 1.9 miles round trip on paved roads
Process Description	Paved roads for movement of machinery for wood chip and wood fuel handling.

Applicable Regulation:
401 KAR 63:010, *Fugitive emissions*.

Emission Unit EU-11 Unpaved Mill Roads Emission Unit EU-12 Paved Mill Roads
Comments: 66,000 wood chip trucks and 14,000 wood fuel trucks on 0.4 mile round trip on unpaved roads. Total distance of approximately 64,000 miles per year. Emissions calculated by AP-42 Chapter 13.2. 66,000 wood chip trucks and 14,000 wood fuel trucks on 1.9 mile round trip on paved roads. Total distance of approximately 304,000 miles per year.

Emission Unit EU-14 BPM Continuous Digester System				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
TRS	≤ 5 ppmv on a dry basis, corrected to 10 percent oxygen	40 CFR 60.283(a)(1)	N/A	Testing, Closed Vent System Leak Detection, Proper Operation of Control Device
OR if the gases are combusted in a lime kiln				
TRS	≤ 8 ppmv on a dry basis, corrected to 10 percent oxygen	40 CFR 60.283 (a)(1)(i) and 40 CFR 60.283(a)(5)	N/A	Testing, Closed Vent System Leak Detection, Proper Operation of Control Device
OR if the uncontrolled exhaust gases are from a new, modified, or reconstructed digester system				
TRS	< 0.005 g/kg ADP (0.01 lb/ton	40 CFR 60.283 (a)(1)(vi)	N/A	Testing, Closed Vent System Leak Detection, Proper Operation of Control Device

Initial Construction Date: 3/1997

Process Description:

Emission Unit EU-14 BPM Continuous Digester System	
Emission Point	B-1
Description	Continuous digester system
Maximum Rated Capacity	512,487 tons per year (tpy) oven dried pulp (ODP).
Process Description	Produces kraft pulp from wood chips.
Control Equipment	Low volume high concentration gases (LVHC) are vented to the non-condensable gases (NCG)/stripper off-gases (SOG) incinerator or the lime kiln no. 3; high volume low concentration gases (HVLC) are vented to the NCG/SOG incinerator or bio-fuel boiler.

Applicable Regulation:
401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

Emission Unit EU-14 BPM Continuous Digester System
401 KAR 63:002, Section 2(4)(l), 40 C.F.R. 63.440 through 63.459, Table 1 (**Subpart S**), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*. **401 KAR 63:002, Section 2(4)(hh)**, 40 C.F.R. 63.960 through 63.967 (**Subpart RR**), *National Emission Standards for Individual Drain Systems*. **Comments:** No emissions in KYEIS. Low volume high concentration gases (LVHC) are vented to the non-condensable gases (NCG)/stripper off-gases (SOG) incinerator [EU-40] or the lime kiln no. 3 [EU-36] as control equipment; high volume low concentration gases (HVLC) are vented to the NCG/SOG incinerator [EU-40] or bio-fuel boiler [EU-42] as control equipment. Maximum Rated Capacity: 512,487 tpy ODP.

Emission Unit EU-19 BPM No. 2 Bleach Plant
Emission Unit EU-20 BPM No. 3 Bleach Plant
Emission Unit EU-21 BPM ClO_2 Generator

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
Total chlorin-ated HAP	Reduce by 99 % **OR** Achieve outlet concentration of 10 ppmv or less **OR** Achieve outlet mass emission rate of 0.001 kg/Mg ODP	40 CFR 63.445(c)	N/A	Operation of scrubber and CMS, LDAR, and proper operation of control devices.

Initial Construction Date: EU-19: 6/1998; EU-20: 2/1997; EU-21: 2/1998

Process Description:

Emission Unit EU-19 BPM No. 2 Bleach Plant	
Emission Point	B-100
Description	No.2 chlorine dioxide (ClO_2) bleach plant
Maximum Rated Capacity	182,500 tpy ADP
Process Description	Bleaches wood pulp
Control Equipment	Bleach plant scrubber

Emission Unit EU-20 BPM No. 3 Bleach Plant	
Emission Point	B-100
Description	No.3 ClO_2 bleach plant
Maximum Rated Capacity	438,000 tpy ADP
Process Description	Bleaches wood pulp
Control Equipment	Bleach plant scrubber

Emission Unit EU-19 BPM No. 2 Bleach Plant
Emission Unit EU-20 BPM No. 3 Bleach Plant
Emission Unit EU-21 BPM ClO_2 Generator

Emission Unit EU-21 BPM ClO_2 Generator	
Emission Point	B-100
Description	ClO_2 generator
Maximum Rated Capacity	620,500 tpy ADP
Process Description	Produces the ClO_2 solution used in the bleaching of wood pulp
Control Equipment	Bleach plant scrubber

Applicable Regulation:
401 KAR 63:002, Section 2(4)(l), 40 C.F.R. 63.440 through 63.459, Table 1 (**Subpart S**), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*.

State-Origin Requirement:
401 KAR 63:021, *Existing sources emitting toxic air pollutants*.

Comments:
Testing of emission units 19 and 20 BPM Bleach plants is required for chlorinated HAP emissions (not including chloroform). The scrubber required to control HAPs shall be operated according to manufacturer's specifications and the following monitored continuously: the scrubber liquid flow rate, scrubbing liquid pH, and the scrubber inlet pressure (or vacuum). The facility will also implement a LDAR program for the closed vent system. The facility has a source-wide ClO_2 limit pursuant to 401 KAR 63:021. Maximum capacity: EU-19: 182,500 tpy ADP, EU-20: 438,000 tpy ADP, EU-21: 620,500 tpy ADP.

Emission Unit EU-22 BPM Multiple Effect Evaporator System				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
TRS	≤ 5 ppmv on a dry basis, corrected to 10 percent oxygen	40 CFR 60.283(a)(1)	N/A	Testing, Closed Vent System Leak Detection, Proper Operation of Control Device
	OR the gases are combusted in a lime kiln and do not contain			
	≤ 8 ppmv on a dry basis, corrected to 10 percent oxygen	40 CFR 60.283 (a)(1)(i) and 40 CFR 60.283(a)(5)	N/A	
	OR the gases are combusted in a recovery furnace and do not contain			
	≤ 5 ppm by volume on a dry basis, corrected to 8 percent oxygen	40 CFR 60.283 (a)(1)(ii), 40 CFR 60.283(a)(2), and 40 CFR 60.283(a)(3)	N/A	
	OR			

Emission Unit EU-22 BPM Multiple Effect Evaporator System				
TRS	≤ 25 ppmvd on a dry basis, corrected to 8 percent oxygen	40 CFR 60.283 (a)(1)(ii), 40 CFR 60.283(a)(2), and 40 CFR 60.283(a)(3)	N/A	Testing, Closed Vent System Leak Detection, Proper Operation of Control Device

Initial Construction Date: 10/1997

Process Description:

Emission Unit EU-22 BPM Multiple Effect Evaporator System	
Emission Point	B-700
Description	Multiple effect evaporators Condensate stripper
Maximum Rated Capacity	967,250 tpy of black liquor solids (BLS)
Process Description	Evaporation of water from the spent pulping chemical (black liquor) to facilitate its combustion in the recovery boilers/furnace(s).
Control Equipment	LVHC and SOG vented to the NCG/SOG incinerator [EU-40], lime kiln No. 3 [EU-36], bio-fuel boiler [EU-42], or recovery boiler [EU-27 and/or EU-29]

Applicable Regulation:
401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 63:002, Section 2(4)(l), 40 C.F.R. 63.440 through 63.459, Table 1 (**Subpart S**), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*.

401 KAR 63:002, Section 2(4)(hh), 40 C.F.R. 63.960 through 63.967 (**Subpart RR**), *National Emission Standards for Individual Drain Systems*.

Comments:
No emissions in KYEIS. LVHC and SOG vented to the NCG/SOG incinerator[EU-40], lime kiln No. 3 [EU-36], bio-fuel boiler [EU-42], or recovery boiler [EU-27 /or EU-29] as control devices. Emission point B-700 has maximum rated capacity of 967,250 tpy of black liquor solids (BLS).

Emission Unit EU-23 BPM Recovery Area Strong & Heavy Black Liquor Tanks

Initial Construction Date: 10/1997

Process Description:

Emission Unit EU-23 BPM Recovery Area Strong & Heavy Black Liquor Tanks	
Emission Point	B-301, 303-309, 700, 900
Description	Three recovery area strong and heavy black liquor tanks Liquor Tanks (Vented to the NCG/SOG incinerator [EU-40])
Maximum Rated Capacity	967,250 tpy of BLS Each tank < 40 cubic meter (m^3)
Process Description	Storage of spent pulping chemical (black liquor) while being processed
Control device	Evaporators [EU-22] for process control purposes, which in turn is vented to the NCG/SOG incinerator [EU-40]

Applicable Regulation:
None.

Comments:
This emission unit is vented to the NCG/SOG incinerator [EU-40]. Emission Points B-301, 303-309, 700, 900 have maximum capacity of 967,250 tpy of BLS.

Emission Unit EU-09 Weak Liquor Tank
Emission Unit EU-24 Weak Liquor Tank

Initial Construction Date: 3/1997

Process Description:

Emission Unit EU-24 BPM Weak Liquor Tank **Emission Unit EU-09 BPM Weak Liquor Tank**	
Emission Point	B-304 (or C-70) 700, 900
Maximum Rated Capacity	967,250 tpy of BLS each
Process Description	Storage of spent pulping liquor (black liquor) prior to it being processed for combustion
Control Equipment	NCG/SOG incinerator or bio-fuel boiler
Comments	Emission unit EU-09 will serve as a backup to emission unit EU-24 and will meet the same requirements.

Recovery and pulp mill weak black liquor tanks. Both tanks will not be operated simultaneously. One tank will be used as a backup tank.

Applicable Regulation:
401 KAR 50:012 *General Application*.

401 KAR 63:002, Section 2(4)(l), 40 C.F.R. 63.440 through 63.459, Table 1 (**Subpart S**), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*.

Emission Unit EU-09 Weak Liquor Tank **Emission Unit EU-24 Weak Liquor Tank**
Comments: The Division has determined that the following regulations do not apply to EU-09 and EU-24: 401 KAR 60:005, Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (**Subpart Kb**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*. Pursuant to final changes published in the Federal Register on October 15, 2003 for 40 CFR 60, Subpart Kb, these weak liquor tanks are exempt because they are process tanks (i.e., each process tank feeds recovery furnace(s)). 401 KAR 63:020, Potentially hazardous matter or toxic substances is not applicable since the units are applicable to 40 CFR 63, Subpart S.

Emission Unit EU-27 BPM Recovery Boiler/Furnace No. 3				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	≤ 0.025 gr/dscf (corrected to 8 % oxygen) and ≤ 106.5 tpy)	40 KAR 51:017 and PSD permit C-93-044	51.8 lb/ton BLS 7.6 lb/mmscf NG 2.074 lb/1000 gallons #5 fuel oil 2 lb/1000 gallons diesel	Good combustion practices, testing, CMS monitoring for TRS, proper operation of control devices, and CAM
	≤ 0.10 g/dscm (0.044 gr/dscf) corrected to 8 % oxygen	40 CFR 63.862(a)(1)(i)(A)		
PM_{10}	≤ 18 lb/hour and 79.7 tpy.	40 KAR 51:017 and PSD permit C-93-044	46.1 lb/ton BLS 7.6 lb/mmscf NG 1.037 lb/1000 gallons #5 fuel oil 2 lb/1000 gallons diesel	
TRS	≤ 5 ppmv on a dry basis corrected to 8 % oxygen	40 KAR 51:017, PSD permit C-93-044 and 40 CFR 60.283(a)(2)	0.0052 lb/ton BLS	
SO_2	≤ 200 ppmv on a dry basis corrected to 8 % oxygen	40 KAR 51:017, PSD permit C-93-044	0.00687 lb/ton BLS 0.6 lb/mmscf NG 146 lb/1000 gallons #5 fuel oil 0.785 lb/1000 gallons diesel	
NO_X	≤ 150 ppmv on a dry basis corrected to 8 % oxygen	40 KAR 51:017, PSD permit C-93-044	0.131 lb/ton BLS 0.22 lb/mmscf NG 24.65 lb/1000 gallons #5 fuel oil 0.26 lb/1000 gallons diesel	
PM	≤ 35 % Opacity on a 6-minute average	40 KAR 51:017 PSD permit C-93-044 and 40 CFR 60.282 (a)(1)(ii)	N/A	COMS

Emission Unit EU-27 BPM Recovery Boiler/Furnace No. 3

Initial Construction Date: 7/1985

Process Description:

Emission Unit EU-27 BPM Recovery Boiler/Furnace No. 3	
Emission Point	B-430, 700, and 900
Description	Recovery boiler No. 3
Installed	July 1985
Primary Fuel	BLS blended with 0.12 to 1 volume % ultra-low sulfur diesel
Secondary Fuel	Natural gas or fuel oil (with less than 0.50% sulfur content)
Maximum Rated Capacity	383,250 tpy of BLS plus 0.12 to 1 volume percent of ultra-low sulfur diesel fuel
Process Description	Combustion of the organic portion of the black liquor for steam generation and recovery of the inorganic portion
Control Equipment	Electrostatic precipitator (ESP)

Applicable Regulation:
401 KAR 50:012 *General Application*.

401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 59:015, *New indirect heat exchangers*.

401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 60:005, Section 2(2)(c), 40 C.F.R. 60.40b through 60.49b (**Subpart Db**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.

401 KAR 63:002, Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (**Subpart MM**), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*.

40 CFR 64, *Compliance Assurance Monitoring*.

Comments:
The Division has determined that the following regulations do not apply to EU-27:
401 KAR 59:080, *New kraft (sulfate) pulp mills* is not applicable to EU-27 since it was not installed before April 9, 1972.

401 KAR 61:025, *Existing kraft (sulfate) pulp mills* is not applicable to EU-27 since it was not installed before April 9, 1972.

Emission Unit EU-27 BPM Recovery Boiler/Furnace No. 3
401 KAR 60:005, Section 2(2)(a), 40 C.F.R. 60.40 through 60.46 (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators* is not applicable to EU-27 since BLS is not a fossil fuel as defined in 40 CFR 60, Subpart D. **401 KAR 60:005, Section 2(2)(d)**, 40 C.F.R. 60.40c through 60.48c (**Subpart Dc**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* does not apply to EU-27 since the unit was constructed before June 9, 1989. **401 KAR 63:020**, *Potentially hazardous matter or toxic substances* does not apply to EU-27 since it is subject to 40 CFR 63, Subpart MM. The Recovery Boiler/Furnace No. 3 is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} for which an ESP is used for compliance. The pre-controlled emissions at the Recovery Boiler/Furnace No. 3 are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036. The volume of BLS consumed in the boiler and the volume of ultra-low sulfur diesel oil fired in the boiler/furnace shall be monitored. The facility is exempt from the requirements of 40 CFR 60, Subpart Db for NOx and SO_2 emissions based on the federally enforceable limit on annual capacity factor.

Emission Unit EU-28 BPM Smelt Tank No. 3				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	≤ 0.12 lb/ton BLS and ≤ 23 tpy	401 KAR 51:017, PSD permit C-93-044	7.9 lb/ton BLS	Monitoring of operating conditions and other parameters correlated to emissions - CMS for scrubbing liquid pressure drop, scrubbing liquid flow rate
	≤ 0.10 kg/Mg (0.20 lb/ton) BLS	40 CFR 63.862(a)(1)(i)(B)		
PM_{10}	≤ 4.7 lb/hour and ≤ 20.6 tpy	401 KAR 51:017, PSD permit C-93-044		
TRS	≤ 0.033 lb/ton BLS (dry weight)	401 KAR 51:017, PSD permit C-93-044	0.008 lb/ton BLS	
SO_2	≤ 0.1 lb/ton BLS	401 KAR 51:017, PSD permit C-93-044	0.606 lb/ton BLS	

Initial Construction Date: 7/1985

Process Description:

Emission Unit EU-28 BPM Smelt Tank No. 3	
Emission Point	B-435, 700, and 900
Description	Smelt tank No. 3
Maximum Rated Capacity	383,250 tpy of BLS
Process Description	Dissolves molten inorganics recovered in the recovery furnace in water to form green liquor
Control Equipment	Scrubber

Emission Unit EU-28 BPM Smelt Tank No. 3

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 63:002 Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (**Subpart MM**), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*.

40 CFR 64, *Compliance Assurance Monitoring*.

Comments:
The Division has determined that the following regulations do not apply to EU-28:
401 KAR 59:080, New kraft (sulfate) pulp mills is not applicable to EU-28 since it was not installed before April 9, 1972

401 KAR 60:005 Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (**Subpart Kb**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*. The requirements of 40 CFR 60, Subpart Kb are exempt because of a specific exemption granted to process flow through tanks in the pulp and paper industry (Docket No. 00-1218, United States Court of Appeals for the District of Columbia, Federal Register Vol. 68, No. 1999, dated 10/15/2003).

The scrubber liquid flow rate and pressure, and the scrubber pressure drop shall be monitored continuously.

Smelt Tank No. 3 is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} and SO_2 for which a scrubber is used for compliance. The pre-controlled emissions at Smelt Tank No. 3 are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036 and updated with permit V-25-013.

Emission Unit EU-29 BPM Recovery Boiler/Furnace No. 4				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	≤ 0.044 gr/dscf at 8% oxygen **AND** 132.61 tpy	401 KAR 51:017, PSD Permit F-96-003 R1, 40 CFR 60.282(a)(1)(i) and 40 CFR 63.862(a)(1)(i)(A)	30.5 lb/ton BLS 5 lb/mmscf NG 5.77 lb/$_{1000}$gal #5 FO 0.7 lb/$_{1000}$gal #5 FO 2 lb/ gal diesel	Good combustion practices, testing, CMS monitoring for TRS, proper operation of control devices, and CAM
CO	≤ 200 ppm at 8% oxygen, and ≤ 639.63 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	1.32 (firing BLS) 40 lb/mmscf NG 5.92 lb/$_{1000}$gal propane 5 lb/$_{1000}$gal diesel	

Emission Unit EU-29 BPM Recovery Boiler/Furnace No. 4				
NO_X	≤ 110 ppm at 8% oxygen, and ≤ 577.952 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	1.8 (firing BLS) 81.1 lb/mmscf NG 32.9 lb/$_{1000}$gal #5 FO 13 lb/$_{1000}$gal propane 0.26 lb/$_{1000}$gal diesel	Good combustion practices, testing, CMS monitoring for TRS, proper operation of control devices, and CAM
SO_2	≤ 100 ppm at 8% oxygen and ≤ 731.01 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.00814 (firing BLS) 0.6 lb/mmscf NG 0.019 lb/$_{1000}$gal propane 0.785 lb/$_{1000}$gal diesel	
TRS	≤ 5 ppm at 8% oxygen and ≤ 19.42 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.0065 (firing BLS)	
VOC	≤ 20 ppm at 8% oxygen and ≤ 100.51 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.01 (firing BLS) 1.7 lb/mmscf NG 1 lb/$_{1000}$gal propane 0.252 lb/$_{1000}$gal diesel	
PM	≤ 35% Opacity on 6-minute average	401 KAR 51:017, PSD Permit F-96-003 R1 and 40 CFR 60.282 (a)(1)(ii)	N/A	COMS

Initial Construction Date: 10/1997

Process Description:

Emission Unit EU-29 BPM Recovery Boiler/Furnace No. 4	
Emission Point	B-440 700, and 900
Description	Recovery boiler No. 4
Primary Fuel	BLS blended with 0.12 to 1 volume % ultra-low sulfur diesel
Secondary Fuel	Natural gas, propane or fuel oil (with <0.50% sulfur content)
Maximum Rated Capacity	584,000 tpy of BLS plus 0.12 to 1 volume percent of ultra-low sulfur diesel fuel
Process Description	Combustion of the organic portion of the black liquor for steam generation and recovery of the inorganic portion
Control Equipment	ESP

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 59:015, *New indirect heat exchangers*.

401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 60:005, Section 2(2)(c), 40 C.F.R. 60.40b through 60.49b (**Subpart Db**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.

Emission Unit EU-29 BPM Recovery Boiler/Furnace No. 4
401 KAR 63:002, Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (**Subpart MM**), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*. **40 CFR 64**, *Compliance Assurance Monitoring*. **Comments:** The Division has determined that the following regulations do not apply to EU-29: **401 KAR 59:080**, *New kraft (sulfate) pulp mills* is not applicable to EU-29 since it was not installed before April 9, 1972. **401 KAR 61:025**, *Existing kraft (sulfate) pulp mills* is not applicable to EU-29 since it was not installed before April 9, 1972. **401 KAR 60:005, Section 2(2)(a)**, 40 C.F.R. 60.40 through 60.46 (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators* is not applicable to EU-29 since BLS is not a fossil fuel as defined in 40 CFR 60, Subpart D. **401 KAR 60:005, Section 2(2)(d)**, 40 C.F.R. 60.40c through 60.48c (**Subpart Dc**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* does not apply to EU-29 since the unit was constructed before June 9, 1989. **401 KAR 63:020**, *Potentially hazardous matter or toxic substances* does not apply to EU-29 since it is subject to 40 CFR 63, Subpart MM. The Recovery Boiler/Furnace No. 4 is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} for which an ESP is used for compliance. The pre-controlled emissions at the Recovery Boiler/Furnace No. 4 are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036. A CMS for opacity and the TRS measurements. Control Equipment: Electrostatic precipitators (ESP). The facility is exempt from requirements the requirements of 40 CFR 60, Subpart Db for NOx and SO_2 emissions based on the federally enforceable limit on annual capacity factor.

Emission Unit EU-30 BPM Smelt Tank No. 4				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	≤ 0.20 lb/ton of BLS and ≤ 29.57 tpy	401 KAR 51:017, PSD Permit F-96-003 R1, 40 CFR 60.282(a)(2) and 40 CFR 63.862 (a)(1)(i)(B)	5.8 lb/ton BLS	Monitoring of operating conditions and other parameters correlated to emissions - CMS for scrubbing liquid pressure drop, scrubbing liquid flow rate
SO_2	≤ 0.1 lb/ton of BLS and ≤ 24.64 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	1.39 lb/ton BLS	
TRS	≤.033 lb/ton of BLS and ≤ 8.13 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.002 lb/ton BLS	
VOC	≤ 0.16 lb/ton of BLS and ≤ 39.42 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.00217 lb/ton BLS	

Emission Unit EU-30 BPM Smelt Tank No. 4

Initial Construction Date: 10/1997

Process Description:

Emission Unit EU-30 BPM Smelt Tank No. 4	
Emission Point	B-445, 700, and 900
Description	Smelt tank No. 4
Maximum Rated Capacity	584,000 tpy of BLS
Process Description	Dissolves molten inorganics recovered in the recovery furnace in water to form green liquor
Control Equipment	Scrubber

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 63:002, Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (**Subpart MM**), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*.

40 CFR 64, *Compliance Assurance Monitoring*.

Comments:
The Division has determined that the following regulations do not apply to EU-30:
401 KAR 59:080, New kraft (sulfate) pulp mills is not applicable to EU-30 since it was not installed before April 9, 1972

401 KAR 60:005 Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (**Subpart Kb**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*. The requirements of 40 CFR 60, Subpart Kb are exempt because of a specific exemption granted to process flow through tanks in the pulp and paper industry (Docket No. 00-1218, United States Court of Appeals for the District of Columbia, Federal Register Vol. 68, No. 1999, dated 10/15/2003).

The scrubber liquid flow rate and pressure, and the scrubber pressure drop shall be monitored continuously.

Smelt Tank No. 4 is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} and SO_2 for which a scrubber is used for compliance. The pre-controlled emissions at Smelt Tank No. 4 are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036 and updated with permit V-25-013.

40 CFR 63, Subpart MM was revised and finalized on November 5, 2020 to include alternative scrubber fan amperage or revolutions per minute. The alternative applies to dynamic scrubbers that operate at ambient pressure; and therefore applies to EU-30 which operates at ambient pressure.

Emission Units: EU-31; EU-39; EU-41; EU-43; EU-49; EU-50; EU-51; EU-52; EU-53

Initial Construction Date: EU-31: 11/1997 (modified 10/2016); EU-39: 10/1995; EU-41: 7/1997; EU-43: 7/1969; EU-49, EU-50:12/1996; EU-51: 12/1980; EU-52, EU-53: 6/1998

Process Description:

Emission Unit EU-31 BPM Causticizing Tanks	
Emission Point	Description
B-501, B-502, B-503 B-504, B-505 B-506, B507 B-508	3 Causticizing tanks 3 Lime mud washers 1 Lime mud storages 1 Mud mix tank
Maximum Rated Capacity	165,219 tpy calcium oxide (CaO)
Process Description	Conversion of inorganic material in green liquor to white liquor (pulping chemical)

Emission Unit EU-39 BPM Green Liquor Clarifiers	
Emission Point	B-680, B-681, 700, and 900
Description	Two green liquor clarifiers
Maximum Rated Capacity	72,000 gallons/hour green liquor or 18.86 tons/hour of CaO
Process Description	Storage and remove inert solids from the green liquor until it is utilized in the re-causticizing process

Emission Unit EU-41 BPM Process Water (Wastewater) Treatment	
Emission Point	B-800, 700, and 900
Description	Process water treatment
Maximum Rated Capacity	25 million gallons per day
Process Description	Biologically treatment of contaminants in spent process water prior to release into the Ohio river

Emission Unit EU-43 BPM Bleach Mill Pulp Dryer System	
Emission Point	B-1000 to B-1005, 700, and 900
Description	Pulp dryer system
Maximum Rated Capacity	167,900 tpy ADP
Process Description	Manufacture of market pulp

Emission Unit EU-49 BPM Brown Stock HD Storage	
Emission Point	B-1600, and B1601
Description	Brown Stock high density (HD) Storage
Maximum Rated Capacity	632,700 tpy ODP
Process Description	Storage of unbleached pulp until processed in the pulp bleaching process

Emission Units: EU-31; EU-39; EU-41; EU-43; EU-49; EU-50; EU-51; EU-52; EU-53

Emission Unit EU-50 BPM Bleached Pulp HD Storage	
Emission Point	Description
B-1700, B-1701, B-1702 and B-1703	Four (4) Bleached Pulp HD Storage Tanks
Maximum Rated Capacity	B-1700: 63,270 tpy ODP B-1701: 31,635 tpy ODP B-1702, B-1703: 601,900 tpy ODP
Process Description	Storage of bleached pulp until it is utilized to manufacture market pulp or paper

Emission Unit EU-51 H-1 Paper Machine	
Emission Point	Description
F-1, F-2, ,F-3 F-4, F-5, F-6, F-7, F-8, F-9 F-10	Vacuum pump, Size press, Reel pulper Dryer hoods Fugitives
Maximum Rated Capacity	252,428 tpy ADP
Process Description	Manufacture of paper

Emission Unit EU-52 H-2 Paper Machine	
Emission Point	Description
F-20, F-21, F-22 F-23, F-24, F-25, F-26, F-27, F-28 F-29	Vacuum pump, Size press, Reel pulper Dryer hoods Fugitives
Maximum Rated Capacity	469,407 tpy ODP
Process Description	Manufacture of paper

Emission Unit EU-53 H-1 & 2 Paper Machine Stock Preparation	
Emission Point	Description
F-30; F-31; F-32 F-33; F-34	Broke chests Hardwood chests Surge chests
Maximum Rated Capacity	8,900,000 x 10^3 gallons/year
Process Description	Prepares and stores pulp prior to being manufactured into paper

Applicable Regulation:
None

Emission Units: EU-31; EU-39; EU-41; EU-43; EU-49; EU-50; EU-51; EU-52; EU-53
Comments: **401 KAR 50:012** *General Application*. applies to all major air contaminant sources for which there is no standard specified in 401 KAR 50 to 65 for VOC emissions and requires that as a minimum, sources apply control procedures that are reasonable, available, and practical (RAP). While emissions at the above emission units do not have an applicable standard for VOC, the EPA has addressed HAP emissions from all sources of emissions at pulp and paper mills during the development of 40 CFR 63, Subpart S. The emission units above are part of paper making process. Therefore, since the EPA has addressed emissions from the paper making process for which 40 CFR 63, Subpart S would be applicable, 401 KAR 50:012 analysis is not required for the above emission units. All emission units above do not have control. The above units are part of the causticizing and papermaking process and part of the pulp and paper source category. The provisions of 40 CFR 63 Subpart S (NESHAP for pulp and paper source category) would apply to processes that produce pulp, paper, or paperboard; located at a plant site that is a major source as defined in 40 CFR 63.2 of subpart A; and that use kraft, soda, sulfite, or semi-chemical pulping processes using wood. However, they are not an affected source as defined in 40 CFR 63 Subpart S for processes specified in 40 CFR 63.440(a)(1). They would be an affected source if the facility opts to comply with the clean condensate alternative where the affected source is the pulping system, bleaching system, causticizing system, and papermaking system. In addition, in the Federal Register Vol. 63, No. 72, April 15, 1998 EPA has identified that papermaking systems would not be required to undergo section 112(g) review. Therefore 401 KAR 63:020 does not apply to the emission units above.

Emission Unit EU-33 BPM Slaker No. 3 Emission Unit EU-37 BPM Lime Silos Emission Unit EU-38 BPM Petroleum Coke Storage Silo Emission Unit EU-54 H-1 & 2 Starch Silos					
Pollutant	**EU**	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM	33 37 38 54	When $P \leq 0.5$ tons/hr $E = 2.34$ lb/hr When $P > 0.5, \leq 30$ tons/hr $E = 3.59 \times P^{0.62}$ Where: E = PM in lb/hr; P = process rate in tons/hr	401 KAR 59:010, Section 3(2)	0.62 lb/ton 0.47 lb/ton 0.47 lb/ton 0.47 lb/ton	Proper operation of control device
	33 37 38 54	20% Opacity	401 KAR 59:010, Section 3(1)(a)	N/A	Visual emission observation once per calendar day & Method 9 if needed See Comments

Emission Unit EU-33 BPM Slaker No. 3
Emission Unit EU-37 BPM Lime Silos
Emission Unit EU-38 BPM Petroleum Coke Storage Silo
Emission Unit EU-54 H-1 & 2 Starch Silos

Initial Construction Date: EU-33: 11/1997; EU-37: 11/1997; EU-38: 12/1986: EU-54: 6/1998

Process Description:

Emission Unit EU-33 BPM Slaker No. 3	
Emission Point	B-530, 700, and 900
Description	Slaker No. 3
Maximum Rated Capacity	72,000 gallons/hour green liquor or 18.86 tons/hour of CaO
Process Description	Conversion of inorganic material in green liquor to white liquor (pulping chemical)
Control Equipment	Wet scrubber

Emission Unit EU-37 BPM Lime Silos	
Emission Point	B-650, 700, and 900
Description	Lime silos (2)
Maximum Rated Capacity	165,219 tpy CaO
Process Description	Storage of lime produced by the kiln or purchased lime until it is utilized in the re-causticizing process
Control Equipment	Baghouse (fabric filter) integral to the unit

Emission Unit EU-38 BPM Petroleum Coke Storage Silo	
Emission Point	B-660, 700, and 900
Description	Coke Silo
Maximum Rated Capacity	17,500 tpy of coke
Process Description	Storage of petroleum coke until utilized as fuel in the lime kiln (emission unit EU-36)
Control Equipment	Baghouse (fabric filter) integral to the unit

Emission Unit EU-54 H-1 & 2 Starch Silos	
Emission Point	Description
F-40, F-42 F-41, F-43	H-1 & H-2 wet end starch silos H-1 & H-2 dry end starch silos
Maximum Rated Capacity	29,930 tpy
Process Description	Storage of dry starch during the period it is unloaded from transport vehicle until it is utilized in the paper making process
Control Equipment	Baghouse (fabric filter) integral to the unit

Emission Unit EU-33 BPM Slaker No. 3
Emission Unit EU-37 BPM Lime Silos
Emission Unit EU-38 BPM Petroleum Coke Storage Silo
Emission Unit EU-54 H-1 & 2 Starch Silos

Applicable Regulation:
401 KAR 59:010, *New Process Operations*.

Comments:
To preclude the applicability of 401 KAR 51:017, emission unit EU-38 shall be controlled by a baghouse (fabric filter). [401 KAR 52:020, Section 10]

If after 180 days of daily visual observations there have been no visible emissions observed, then the permittee may reduce visual observations to no less than weekly while the affected facility is operating. If during weekly visual observations, visible emissions are observed, then the permittee shall resume to perform daily visual observations.

Emission Unit EU-36 BPM Lime Kiln #3				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	≤ 38.89 tpy	PSD Permit F-96-003 R1 and netting Title V/PSD Permit V-04-012	12 lb/ton	Stack tested emission factor, rolling total of monthly emission rates for annual emissions
PM	≤ 0.15 g/dscm (0.064 gr/dscf) corrected to 10 % oxygen	40 CFR 63.862(a)(1)(i)(C)		
CO	≤ 300 ppm at 10% oxygen and 243.57 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.013 lb/ton	
NOx	≤ 150 ppm at 10% oxygen, and 200.07 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	1.741 lb/ton	Stack tested emission factor, rolling total of monthly emission rates for annual emissions
SO_2	≤ 73 ppm at 10% oxygen, and 135.78 tpy	401 KAR 51:017, PSD Permit F-96-003 R1 and netting Title V/PSD Permit V-04-012	0.525 lb/ton	
TRS	≤ 7.89 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.054 lb/ton	
	AND from any lime kiln, any gases which contain			
	≤ 8 ppmv on a dry basis, corrected to 10 percent oxygen	40 CFR 60.283(a)(5)]	NA	Good combustion practices, testing, CMS monitoring for TRS, proper operation of control devices, and CAM

Emission Unit EU-36 BPM Lime Kiln #3				
VOC	measured as methane ≤ 75 ppm at 10% oxygen, and 93.18 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.0024 lb/ton	Stack tested emission factor, rolling total of monthly emission rates for annual emissions

Initial Construction Date: 11/1997

Process Description:

Emission Unit EU-36 BPM Lime Kiln No. 3	
Emission Point	B-630
Description	Lime kiln No. 3 (Includes PCC Plant)
Primary Fuel	Petroleum coke/natural gas
Secondary Fuel	Fuel Oil (with <0.50% sulfur content) and propane
Maximum Rated Capacity	165,219 tpy CaO
Process Description	Conversion of calcium carbonate ($CaCO_3$) to CaO for use in the re-causticizing process and as a backup incineration device for LVHC and SOG
Control Equipment	ESP
Comments	This unit may serve as an alternate combustion device for the treatment of organic HAP

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 60:005, Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*.

401 KAR 63:002, Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (**Subpart MM**), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*.

40 CFR 64, *Compliance Assurance Monitoring*.

Comments:
The Division has determined that the following regulations do not apply to EU-36:
401 KAR 59:080, *New kraft (sulfate) pulp mills* is not applicable to EU-36 since it was not installed before April 9, 1972.

401 KAR 61:025, *Existing kraft (sulfate) pulp mills* is not applicable to EU-36 since it was not installed before April 9, 1972.

401 KAR 63:020, *Potentially hazardous matter or toxic substances* does not apply to EU-36 since it is subject to 40 CFR 63, Subpart MM.

Emission Unit EU-36 BPM Lime Kiln #3
Lime Kiln No. 3 is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} for which an ESP is used for compliance. The pre-controlled emissions at Lime Kiln No. 3 are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036.

Emission Unit EU-40 BPM NCG/SOG Incinerator				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	≤ 12.8 lb/hour and 56.1 tpy	401 KAR 51:017, PSD Permit F-96-003 R1 and netting Title V/PSD Permit V-04-12	6.1516 lb/ton 0.7 lb/mmscf propane	Stack tested emission factor, rolling total of monthly emission rates for annual emissions, proper operation of control device and monitoring of parameters for the scrubber
CO	≤ 12.6 lb/ hour and ≤ 55.19 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.00016 lb/ton 7.5 lb/mmscf	
NOx	≤ 19.13 lb/ hour and ≤ 83.8 tpy	401 KAR 51:017, PSD Permit F-96-003 R1 and netting Title V/PSD Permit V-04-012	0.27 lb/ton 13 lb/mmscf propane	
TRS	≤ 0.92 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.0021 lb/ton	Monitoring, Good combustion practices, testing, CMS monitoring for temperature TRS, proper operation of control devices, and CAM, LDAR
SO_2	≤ 3.3 lb/ hour and ≤ 14.42 tpy	401 KAR 51:017, PSD Permit F-96-003 R1 and netting Title V/PSD Permit V-04-012	0.646 lb/ton 0.01784 propane	
VOC	as CH_4 ≤ 50 ppm corrected to 8% Ox and ≤ 12.57 tpy	401 KAR 51:017, PSD Permit F-96-003 R1	0.189 lb/ton 1 lb/mmscf propane	Stack tested emission factor, rolling total of monthly emission rates for annual emissions, proper operation of control device and monitoring of parameters for the scrubber

Initial Construction Date: 11/1997

Process Description:

Emission Unit EU-40 BPM NCG/SOG Incinerator	
Emission Point	B-700
Description	NCG/SOG incinerator
Primary Fuel	Compounds in HVLC, LVHC, SOG and natural gas
Secondary Fuel	Propane (heat input: 2.04 mmBtu/hour)
Maximum Rated Capacity	512,487 oven dried tpy
Process Description	Destruction of HAPs generated during the pulping and liquor recovery processes
Control Equipment	Scrubber and low NO_X burner

Emission Unit EU-40 BPM NCG/SOG Incinerator
Applicable Regulation: **401 KAR 51:017**, *Prevention of significant deterioration of air quality*. **401 KAR 60:005, Section 2(2)(kk)**, 40 C.F.R. 60.280 through 60.285 (**Subpart BB**), *Standards of Performance for Kraft Pulp Mills*. **401 KAR 63:002, Section 2(4)(l)**, 40 C.F.R. 63.440 through 63.459, Table 1 (**Subpart S**), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*. **40 CFR 64**, *Compliance Assurance Monitoring*. **Comments:** The Division has determined that the following regulations do not apply to EU-40: **401 KAR 59:080**, *New kraft (sulfate) pulp mills* is not applicable to EU-40 since it was not installed before April 9, 1972. **401 KAR 61:025**, *Existing kraft (sulfate) pulp mills* is not applicable to EU-40 since it was not installed before April 9, 1972. **401 KAR 63:020**, *Potentially hazardous matter or toxic substances* does not apply to EU-40 since it is subject to 40 CFR 63, Subpart S. The NCG/SOG Incinerator is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} and SO_2 for which a wet scrubber is used for compliance. The pre-controlled emissions at the NCG/SOG Incinerator are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036.

Emission Unit EU-42 BPM Bio-fuel Boiler				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	0.10 lb/mmBtu and 43.8 tpy	PSD/Netting permits F-96-003 R1 and V-04-012, and 40 CFR 60.436(b)	15 lb pm/ton	Testing, Specific Recordkeeping, and Reporting Requirements
Filterable PM (TSM)	7.4×10^{-3} lb/mmBtu heat input; (6.4×10^{-5} lb/mmBtu heat input) OR 9.2×10^{-3} lb/mmBtu steam output	Item 9 in Table 2, to 40 CFR 63, Subpart DDDDD	15 lb pm/ton	
	1.1×10^{-1} lb/mmBtu heat input; (1.2×10^{-3} lb/mmBtu heat input) OR 1.4×10^{-1} lb/mmBtu steam output	Item 9 in Table 15, to 40 CFR 63, Subpart DDDDD		
CO (CEMS)	0.3 lb/mmBtu and 827.82 tpy	PSD permit F-96-003 R1	0.017 lb/ton	
	210 ppmvd corrected to 3% O2; (310 ppmvd corrected to 3% O2, 30-day rolling average) OR 2.1×10^{-1} lb/mmBtu steam output	Item 9 in Table 2, to 40 CFR 63, Subpart DDDDD		

Emission Unit EU-42 BPM Bio-fuel Boiler				
CO (CEMS)	470 ppmvd corrected to 3% O_2; (310 ppmvd corrected to 3% O_2, 30-day rolling average) OR 4.6×10^{-1} lb/mmBtu steam output	Item 9 in Table 15, to 40 CFR 63, Subpart DDDDD	0.017 lb/ton	Testing, Specific Recordkeeping, and Reporting Requirements
NO_X	0.25 lb/mmBtu and 830.0 tpy	PSD/Netting permits F-96-003 R1 and V-04-012	2.1 lb/ton	
	When firing gaseous fuels			
	0.20 lb/mmBtu	40 CFR 60.44b(a)	100 lb/mmscf	
	When firing Fuel Oil #2			
	0.20 lb/mmBtu	40 CFR 60.44b(a)	24 $lb/_{1000}$gal	
SO_2	0.033 lb/mmBtu and 73.67 tpy	PSD/Netting permits F-96-003 R1 and V-04-012	0.03 lb/ton	
VOC	0.10 mmBtu and 257.54 tpy	PSD permit F-96-003 R1	0.0004 lb/ton	
HCL	2.0×10^{-2} lb/mmBtu heat input; OR 2.3×10^{-2} lb/mmBtu steam output	Item 1 in Table 2, 40 CFR 63, Subpart DDDDD	0.00811 lb/ton	
	2.2×10^{-2} lb/mmBtu heat input; OR 2.5×10^{-2} lb/mmBtu steam output	Item 1 in Table 15, 40 CFR 63, Subpart DDDDD		
Mercury	5.4×10^{-6} lb/mmBtu heat input; OR 6.2×10^{-6} lb/mmBtu steam output	Item 1 in Table 2, 40 CFR 63, Subpart DDDDD	0.0000171 lb/ton	
	5.7×10^{-6} lb/mmBtu heat input; OR 6.4×10^{-6} lb/mmBtu steam output	Item 1 in Table 15, 40 CFR 63, Subpart DDDDD		
PM	20% Opacity	40 CFR 60.43b(f)	N/A	COMS

Initial Construction Date: 5/1997

Process Description:

Emission Unit EU-42 BPM Bio-fuel Boiler with Oxygen Trim System	
Emission Point	B-900
Description	To process waste wood/hogged fuel for steam generation and as a backup incineration device for HVLC's
Primary Fuel	Waste wood/hogged fuel
Secondary Fuel	Natural gas, fuel oil (<0.50% sulfur content), and propane
Maximum Rated Capacity	1050 mmBtu/hour; (Hogged fuel input: 570 mmBtu/hour) (Natural gas fuel input: 480 mmBtu/hour)
Process Description	Processes waste wood/hogged fuel for steam generation
Control Equipment	ESP

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality.*

Emission Unit EU-42 BPM Bio-fuel Boiler
401 KAR 59:015, *New indirect heat exchangers*. **401 KAR 60:005, Section 2(2)(c)**, 40 C.F.R. 60.40b through 60.49b (**Subpart Db**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*. **401 KAR 63:002, Section 2(4)(iiii)**, 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 15 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.* **40 CFR 64**, *Compliance Assurance Monitoring*. **Comments:** The Division has determined that the following regulations do not apply to EU-42: **401 KAR 60:005, Section 2(2)(a)**, 40 C.F.R. 60.40 through 60.46 (Subpart D), *Standards of Performance for Fossil-Fuel-Fired Steam Generators* is not applicable to EU-42 pursuant 40 CFR 60.40b(j) wherein any affected facility meeting the applicability requirements under 40 CFR 60.40b(a) and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to 40 CFR 60, Subpart D. **401 KAR 60:005, Section 2(2)(b)**, 40 C.F.R. 60.40Da through 60.52Da (Subpart Da), *Standards of Performance for Electric Utility Steam Generating Units* does not apply since the unit is not an electric utility steam generating unit. **401 KAR 60:005, Section 2(2)(d)**, 40 C.F.R. 60.40c through 60.48c (Subpart Dc), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* does not apply to EU-29 since the unit has a maximum design heat input greater than 100 mmBtu/hr. The Bio-fuel Boiler is at a major source as provided under 40 CFR 70 and 71 which is subject to emission limitations for PM/PM_{10} for which an ESP is used for compliance. The pre-controlled emissions at the Bio-fuel Boiler are above the threshold to be classified as a major source. CAM was added to the facility with the issuance of permit V-12-036.

Emission Unit EU-44 BPM Chips & Wood Fuel Unloading				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	0.09 lb/hour 0.4 tpy	PSD permit F-96-003 R1	0.000187 lb PM/ton $9.3x10^{-5}$ lb PM_{10}/ton	Calculated hourly and annual emissions using emission factors from EPA, NCASI, and equipment manufacturer
Opacity	20 %	401 KAR 59;010, Section 3(1)(a)	N/A	Visual observation once per calendar day & Method 9 if needed
Initial Construction Date: 4/1988				

Emission Unit EU-44 BPM Chips & Wood Fuel Unloading

Process Description:

Emission Unit EU-44 BPM Chips & Wood Fuel Unloading	
Emission Point	B-1100, B-1101, 700, and 900
Description	BPM truck railcar unloading
Maximum Rated Capacity	2,628,000 tpy, 300 tons/hour (monthly average)
Process Description	Unloading of chips used for the manufacture of pulp and to unload wood fuel
Control Equipment	None

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 59:010, *New process operations*.

Comments:
Maximum Rated Capacity: 2,628,000 tpy, 300 tons/hour (monthly average)

If after a six-month daily observation period, there has been no visible emissions observed then the survey frequency may be reduced to once per calendar week. If during a reduced weekly frequency survey, visible emissions are observed, then the survey frequency shall return to daily.

Emission Unit EU-45 BPM Chips & Wood Fuel Handling				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	0.274 lb/hour 1.2 tpy	PSD permit F-96-003 R1	0.00044 lb PM/ton 0.00021 lb PM_{10}/ton	Emission factor provided in application
Opacity	20%	401 KAR 29;010, Section 3(1)(a)	N/A	Visual observation once per calendar day & Method 9 if needed

Initial Construction Date: 4/1998

Process Description:

Emission Unit EU-45 BPM Chips & Wood Fuel Handling	
Emission Point	B-1200 and B-1201 B-1202, 700, and 900
Description	Chip screening Chip & wood fuel reclaiming Transfer chip piles
Maximum Rated Capacity	2,409,000 tpy, 275 tons/hour (monthly average)
Process Description	Transports chips to the pulping process and wood fuel to the boilers

Emission Unit EU-45 BPM Chips & Wood Fuel Handling	
Control Equipment	None

Applicable Regulation:
401 KAR 51:017, *Prevention of significant deterioration of air quality*.

401 KAR 59:010, *New process operations*.

Comments:
Maximum rated capacity of 275 tons per hour, or 2,409,000 tpy.

If after a six-month daily observation period, there has been no visible emissions observed then the survey frequency may be reduced to once per calendar week. If during a reduced weekly frequency survey, visible emissions are observed, then the survey frequency shall return to daily.

Emission Unit EU-48 BPM Methanol Storage Tank

Initial Construction Date: 2/1998

Process Description:

Emission Unit EU-48 BPM Methanol Storage Tank	
Emission Point	B-1500
Description	Methanol storage tank
Maximum Rated Capacity	< 20,000 gallons maximum storage; 6,176,020 gallons/year
Process Description	Storage of methanol until utilized to manufacture ClO_2
Control Equipment	None

Applicable Regulation:
401 KAR 60:005, Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (**Subpart Kb**), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*.

401 KAR 63:002, Section 2(4)(kkk), 40 C.F.R. 63.2330 through 63.2406, Tables 1 through 12 (**Subpart EEEE**), *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*.

Comments:
Maximum Rated Capacity: Less than 20,000 gallons maximum storage capacity; 6,176,020 gallons/year

Emission Unit EU-57 Wood Chip Barge Unloading and Transfer

Initial Construction Date: 1/2012

Process Description:

Emission Unit EU-57 Wood Chip Barge Unloading and Transfer	
Emission Point	Barge unloading system consisting of 4 transfer points
Description	Wood chips are unloaded from barge using claim-shell crane to a conveyor, transferred to a hopper and dropped to another conveyor to deliver the chips to the existing wood chip handling area
Maximum Rated Capacity	1,000 tons wood chips per hour; and 2,628,000 tons wood chips per year at 40% moisture
Process Description	Transports chips from barge unloading terminal to wood chip handling area in Emission Unit 44 and 45
Control Equipment	None

Applicable Regulation:
401 KAR 63:010, *Fugitive emissions*.

Comments:
No controls. Maximum rated capacity of 750 tons per hour, or 2,628,000 tons per year at 40% moisture. Potential emissions are based on 1067 hours of operation per year. Unit consists of 4 transfer points. Emission factor of 5.0×10^{-5} lb/ton PT per transfer point.

Emission Units: A58-03; A58-04 BPM; A58-05; A58-06; A58-08; A58-09; A58-10

Initial Construction Date: A58-03: 1997; A58-04: 1995; A58-05: 2001; A58-06: 1979; A58-08: 1966; A58-09: 1996; A58-10: 2007

Process Description:

Emission Unit	Description	Manufacture Date	Rated Capacity hp	Emission Unit Name
A58-03	Caterpillar 3306 PC	1997	385	BPM recovery emergency generator
A58-04	Continental TMD27	1995	66	BPM lime kiln no. 3 generator
A58-05	Caterpillar 3306	2001	382	BPM turbine emergency generator
A58-06	Caterpillar 3304PC	1979	142	BPM Recaust emergency generator
A58-08	Cummins NHC-4-1P	1966	332	KMM Fire pond emergency engine
A58-09	Caterpillar 3412	1996	896	FPM H-2 emergency generator
A58-10	Generac SD010	2004	18.8	Guard shack emergency generator

Emission Units: A58-03; A58-04 BPM; A58-05; A58-06; A58-08; A58-09; A58-10

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

Comments:
The Division has determined that the following regulations do not apply to A58-05, A58-06, A58-08, A58-09, and A58-10:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (**Subpart IIII**), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* does not apply to the engines listed above because they were all manufactured before April 1, 2006.

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* does not apply to the engines listed above because they are all diesel fired and are not spark ignition.

Caterpillar 3306PC, 385 HP, Diesel Fired. 19.7 gallon/hour fuel consumption.

Continental TMD27, 66 HP, Diesel Fired. 3.4 gallon/hour fuel consumption.

Caterpillar 3306, 382 HP, Diesel Fired. 19.5 gallon/hour fuel consumption.

Caterpillar 3304PC, 142 HP, Diesel Fired. 7.25 gallon/hour fuel consumption.

Caterpillar NHC-4-1P, 332 HP, Diesel Fired. 17.0 gallon/hour fuel consumption.

Caterpillar 3412, 896 HP, Diesel Fired. 45.78 gallon/hour fuel consumption.

Generac SD010, 18.8 HP, Diesel Fired. 0.96 gallon/hour fuel consumption.

Emission Unit A58-11 Server Room Generator

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
NOx	2.0 g/HP-hour, 160 ppmvd @ 15% O_2	40 CFR 60, Subpart JJJJ	2254.2 lb/mmscf, AP-42 3.2-3	Engine certification or testing
CO	4.0 g/HP-hour, 540 ppmvd @ 15% O_2	40 CFR 60, Subpart JJJJ	3794.4 lb/mmscf AP-42 3.2-3	
VOC	1.0 g/HP-hour, 86 ppmvd @ 15% O_2	40 CFR 60, Subpart JJJJ	30.19 lb/mmscf AP-42 3.2-3	

Initial Construction Date: 10/2011

Process Description:

Emission Unit	Description	Manufacture Date	Rated Capacity	Purpose
A58-11	Cummins WSG-1068	2011	176 hp	Server room generator

Emission Unit A58-11 Server Room Generator

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*.

Comments:
The Division has determined that the following regulations do not apply to A58-11:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (**Subpart IIII**), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* does not apply to the engine because it is not a spark ignition engine.

Certified Cummins WSG-1068, 176 HP, Natural Gas-Fired, 4 Stroke Rich Burn. 0.0013 mmscf/hour fuel consumption.

Emission Unit A58-12 Gate G Generator

Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
HC + NOx	8.0 g/kW-hr	40 CFR 60.4231(a) and Table1 to 40 CFR 1054.105	2700.98 lb/mmscf, EPA Certified	Engine Certification
CO	610 g/kW-hr		98585.92 lb/mmscf EPA Certified	

Initial Construction Date: 3/2020

Process Description:

Emission Unit	Description	Manufacture Date	Rated Capacity	Purpose
A58-12	Generac G0070321	June 2019	14.75 hp	Gate G generator

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*.

Comments:
Certified Generac G0070321, 14.75 HP, LPG (Propane)-Fired, 4 Stroke Rich Burn. 0.00005 mmscf/hour fuel consumption.

Emission Unit A58-02 BPM Fire Pond Engine Emission Unit A58-07 FPM Fire Pond Engine					
Pollutant	**EU**	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
CO	A58-02 A58-07	230 ppmvd @ 15% O_2	Item 2 of Table 2c to 40 CFR 63, Subpart ZZZZ	130.15 lb/$_{1000}$gal, AP-42 3.3-1	Performance Testing, Monitoring, Reporting

Initial Construction Date: A58-02: 1979; A58-07: 1996

Process Description:

Emission Unit	Description	Manufacture Date	Rated Capacity	Purpose
A58-02	Caterpillar 3306 PC	1979	249	BPM Fire pond engine
A58-07	Caterpillar 3306	1996	287	FPM Fire pond engine

Applicable Regulation:
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

Comments
The Division has determined that the following regulations do not apply to A58-02 and A58-07:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (**Subpart IIII**), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* does not apply to the engines listed above because they were all manufactured before April 1, 2006.

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* does not apply to the engines listed above because they are all diesel fired and are not spark ignition.

401 KAR 51:017, *Prevention of significant deterioration of air quality* has been precluded by taking a synthetic minor limitation on hours of operation for each engine.

Caterpillar 3306PC, 249 HP, Diesel Fired. 12.7 gallon/hour fuel consumption. 1,500 hour synthetic limit.
Caterpillar 3306, 287 HP, Diesel Fired. 14.66 gallon/hour fuel consumption. 1,500 hour synthetic limit.

Emission Unit EU-59 Backup Boiler				
Pollutant	**Emission Limit or Standard**	**Regulatory Basis for Emission Limit or Standard**	**Emission Factor Used and Basis**	**Compliance Method**
PM/PM_{10}	0.10 lb/mmBtu;	401 KAR 59:015, Section 4(1)(b)	7.6 lb/10^6 scf AP-42 1.4-2	Initial Testing
PM	20 % Opacity	401 KAR 59:015, Section 4(2)	N/A	Assumed to be in compliance by burning natural gas

Emission Unit EU-59 Backup Boiler				
NO_X	0.20 lb/mmBtu	40 CFR 60.44b(a)	36.3 lb/10^6 scf Vendor supplied	Initial Testing and CEMS
SO_2	0.80 lb/mmBtu	401 KAR 59:015 Section 5(1)(b)	0.6 lb/10^6 scf AP-42 1.4-2	Assumed to be in compliance by burning natural gas
	0.20 lb/mmBtu	40 CFR 60.42b(k)(1)	0.6 lb/10^6 scf AP-42 1.4-2	Exempt based on Fuel records

Initial Construction Date: 12/2018

Process Description:

Emission Unit EU-59 Backup Boiler with Oxygen Trim System	
Emission Point	Cleaver-Brooks package boiler; Model NB-701D-130; SN RT-4123
Description	358.6 mmBtu/hour boiler firing gas 1 fuels
Maximum Rated Capacity	0.3586 mmscf/hour
Process Description	Backup boiler
Control Equipment	None

Applicable Regulation:
401 KAR 51:160, *NO_X requirements for large utility and industrial boilers*.

401 KAR 51:220, *CAIR NO_X ozone season trading program*.

401 KAR 59:015, *New indirect heat exchangers*.

401 KAR 60:005, Section 2(2)(c), 40 C.F.R. 60.40b through 60.49b (**Subpart Db**), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.*

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 15 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.*

Comments:
Maximum Rated Capacity: 0.3586 mmscf/hour. No controls. CEM installed for NO_X.

401 KAR 51:017 *Prevention of significant deterioration of air quality*.
To preclude applicability of 401 KAR 51:017 Section 8 through 16, emissions from the boiler shall not exceed the following tons per year based on 12-month rolling total: [401 KAR 52:020, Section 10]
NO_X 38.0
CO 87.9
$PM_{2.5}$ 8.0

Emission Unit EU-59 Backup Boiler
For compliance with the synthetic minor emission limitations the maximum fuel usage rate shall not exceed 2,093.66 mmscf/year. [401 KAR 52:020, Section 10] Pursuant to 40 CFR 60.42b(k)(2), units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO_2 emission rate of 140 ng/J (0.32 lb/mmBtu) heat input or less are exempt from the SO_2 emissions limit of 0.2 lb/mmBtu in 40 CFR 60.42b(k)(1). Since the permittee only burns natural gas it is not subject to the compliance and performance testing requirements of 40 CFR 60.45b if the permittee obtains fuel receipts as described in 40 CFR 60.49b(r). The results of the initial testing conducted using reference methods in 401 KAR 50.015 shall include the lb/mmBtu of PM/PM_{10} and NO_X. To determine compliance with the emission limits for NO_X required under 40 CFR 60.44b, the permittee shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring NO_X under 40 CFR 60.48(b). [40 CFR 60.46b(e)] While 401 KAR 51:160 and 401 KAR 51:220 are applicable to EU-59 neither regulations contain requirements which apply to EU-59. These regulations pertain to CAIR NO_X Oxone Season Units as defined in 40 CFR 96.302 as units that are subject to the CAIR NO_X Ozone Season Trading Program under 40 CFR 96.304. Furthermore, pursuant to 40 CFR 96.304(a)(1), units in a State shall be CAIR NO_X Ozone Season units if the units are a fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale. EU-59 would be subject to the requirements of 401 KAR 51:160 and 401 KAR 51:220, but because it does not produce electricity for sale, it is not subject to the requirements of either regulation.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-40 (NCG/SOG incinerator)	Scrubber	PM/PM_{10}	401 KAR 51:017	As Required	5	12.8 lb/hr 56.1 tpy	13.86 lb/hr 50.1 tpy	1465 ODP/day	CMN20050011	9/15/2005
EU-40 (NCG/SOG incinerator)	Scrubber	PM/PM_{10}	401 KAR 51:017	As Required	5	12.8 lb/hr	0.466 lb/hr	53 ODTP/hr	CMN20060003	1/25/2006
EU-28 (BPM Smelt Tank No. 3)	Scrubber	Particulate	401 KAR 51:017	5 years	5	0.12 lb/ton BLS	0.08 lb/ton BLS	88,714.5 BLS	CMN20060004	5/11/2006
		PM_{10}			5	4.7 lb/hr 20.6 tpy	3.72 lb/hr 16.1 tpy			
		SO_2			6c	200 ppm	3.1 ppm			
EU-40 (NCG/SOG incinerator)	NA	TRS	401 KAR 51:017	As Required	16	NA	0.00107 lb/to ODTP	58.5 ODTP/hr	CMN20060011	8/29/2006
EU-40 (NCG/SOG incinerator)	NA	SO_2	401 KAR 51:017	As Required	6	3.3 lb/hr 14.45 tpy	2.02 lb/hr 10.65 tpy	62.4 ODTP/hr	CMN20060013	8/11/2006
EU-40 (NCG/SOG incinerator)	Scrubber	PM/PM_{10}	401 KAR 51:017	As Required	5b	12.8 lb/hr	6.60 lb/hr	53.84 ODTP/hr	CMN20070016	8/24/2007
EU-36 (Lime Kiln No. 3)	NA	NOx	401 KAR 51:017	5 years	7E	150 ppm @ 10% O_2	129.54 ppm @ 10% O_2	300.50 ton CaO/day	CMN20070019	11/6/2007
		SO_2			6C	73.0 ppm @ 10% O_2	28.5 ppm @ 10% O_2			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
KMM Package Boiler (Removed)	NA	Particulate	401 KAR 51:017	As Required	5	0.1 lb/mmBtu	0.0025 lb/mmBtu	199.2 mmBtu/hr	CMN20080010	3/6/2008
		SO_2			8	0.8 lb/mmBtu 40 tpy	0.00066 lb/mmBtu 0.11 tpy			
		NOx			7E	40 tpy	23 tpy			
EU-19, EU-20, EU-21 (Bleach Plant)	Bleach Plant Scrubber	Chlorinated HAP	40 CFR 63.445(c)	5 years	26A	10 ppmv	0 ppmv	53 tons ODP/hour	CMN20080011	3/11/20008
		ClO_2				10 ppmv	1.77 ppmv			
KMM Package Boiler (Removed)	NA	Particulate	401 KAR 51:017	As Required	5	0.1 lb/mmBtu	0.007 lb/mmBtu	162.4 mmBtu/hr	CMN20080012	3/5/2008
		SO_2			8	0.315 lb/mmBtu 40 tpy	0.00089 lb/mmBtu 0.07 tpy			
		NOx			7E	0.2 lb/mmBtu 40 tpy	0.1 lb/mmBtu 8.09 tpy			
		VOC			25A	99 tpy	0.66 tpy			
EU-36 (Lime Kiln No. 3)	ESP	Particulate	40 CFR 63.862(a)(1)(i)(C)	5 years	5	0.064 gr/dscf @ 10% O_2	0.0049 gr/dscf @ 10% O_2	315.1 CaO tons/day	CMN20080018	8/27/2008 & 9/3/2008
		VOC	401 KAR 51:017		25A	75 ppm @ 10% O_2	0.34 ppm @ 10% O_2			
		CO			10B	300 ppm @ 10% O_2	1.09 ppm @ 10% O_2			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-42 (Bio Fuel Boiler)	ESP	Particulate	40 CFR 63.7520	Annually	5	0.07 lb/mmBtu	0.01 lb/mmBtu	605.85 mmBtu/hour	CMN20080018	8/27/2008 & 9/3/2008
		SO_2	401 KAR 51:017	Within 5 years of most recent test.	8	0.02 lb/mmBtu	0.002 lb/mmBtu			
		VOC			25A	0.1 lb/mmBtu	0.000026 lb/mmBtu			
		CO			10B	0.3 lb/mmBtu	0.000114 lb/mmBtu			
EU-19, EU-20, EU-21 (Bleach plant)	Bleach Plant Scrubber	Chlorine	40 CFR 63.445(c)	Within 5 years of most recent test.	26A	10 ppm	0 ppm	54.63 tons/hour	CMN20090012	6/9/2009
		Chlorine Dioxide				10 ppm	0.3 ppm			
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16	10%	1.4%	"Normal Load"	CMN20090015	8/25/2009 – 8/28/2009
		O_2			3A	1%	0.28%			
EU-27 (Recovery Furnace No 3)		TRS			16	10%	3.4%			
		O_2			3A	1%	0.19%			
EU-29 (Recovery Furnace No. 4)		TRS			16	10%	1.7%			
		O_2			3A	1%	0.19%			
EU-42 (Bio Fuel Boiler)		NOx			7E	20%	2.9%			
		O_2			3A	1%	0.08%			
EU-27 (Recovery furnace no. 3)	ESP	Particulate	40 CFR 63.865	Within 5 years of most recent test.	7E	150 ppm @ 8% O_2	66.1 PPM @ 8% O_2	32.9 BLS tons/hour	CMN20090018	12/9/2009 - 12/11/2009
EU-29 (Recovery Furnace No 4)		Particulate			7E	110 ppm @ 8% O_2	92.3 PPM @ 8% O_2	63.06 BLS tons/hour		

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16	10%	6.7%	252.14 gpm lime mud precoat filter flow	CMN20100018	8/18/2010-8/20/2010
		O_2			3	1%	0.18%			
EU-27 (Recovery Furnace No 3)		TRS			16	10%	5.4%	225.54 KPPH Steam		
		O_2			3	1%	0.09%			
EU-29 (Recovery Furnace No 4)		TRS			16	10%	6.4%	432.89 KPPH steam		
		O_2			3	1%	0.13%			
EU-42 (Bio fuel Boiler)		NOx			7E	20%	14.1%	311.03 KPPH steam		
		O_2			3A	1%	0.41%			
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16	10%	2.14%	299.8 gpm lime mud precoat filter flow	CMN20110016	8/2/2011 – 8/4/2011
		O_2			3	1%	0.52%			
EU-27 (Recovery Furnace No 3)		TRS			16	10%	4.19%	294.38 KPPH steam		
		O_2			3	1%	0.03%			
EU-29 (Recovery Furnace No 4)		TRS			16	10%	3.93%	406.47 KPPH steam		
		O_2			3	1%	0.31%			
EU-42 (Bio Fuel Boiler)		NOx			7E	20%	10.67%	177.47 KPPH steam		
		O_2			3A	1%	0.18%			
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16	10%	2.07%	299.81 CaO tons/day	CMN20120022	7/31/2012 – 8/2/2012
		O_2			3	1%	0.01%			
EU-27 (Recovery Furnace No 3)		TRS			16	10%	2.3%	270.81 KPPH Steam		
		O_2			3	1%	0.09%			
EU-29 (Recovery Furnace No. 4)		TRS			16	10%	1.72%	469.77 KPPH Steam		
		O_2			3	1%	0.26%			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-42 (Bio Fuel Boiler)	ESP	NOx	RATA	Annually	7E	20%	2.62%	292.16 KPPH Steam	CMN20120022	7/31/2012 – 8/2/2012
		O_2			3A	1%	0.21%			
EU-42 (Bio Fuel Boiler)	ESP	NOx	RATA	Annually	7E	20%	6.98%	292.86 KPPH Steam	CMN20130015	9/24/2013
EU-27 (Recovery Furnace No. 3)	ESP	TRS	RATA	Annually	16	10%	6.06%	270.81 KPPH Steam	CMN20130016	9/12/2013
		O_2			3	1%	0.16%			
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16	10%	3.59%	194.61 CaO tons/day	CMN20130018	9/26/2013
		O_2			3	1%	0.27%			
EU-29 (Recovery Furnace No. 4)	ESP	TRS	RATA	Annually	16	10%	1.4%	72.38 KPPH Steam	CMN20130021	9/11/2013
		O_2			3	1%	0.2%			
EU-28 (BPM Smelt Tank No. 3)	Scrubber	TRS	401 KAR 51:017	5 years	16	0.03 lb/ton	0.011 lb/ton	47.76 BLS tons/hour	CMN20130022	9/12/2013
EU-30 (BPM Smelt Tank No. 4)	Scrubber	TRS	401 KAR 51:017	5 years	16	0.033 lb/ton BLS	0.003 lb/ton BLS	72.38 BLS tons/hour	CMN20130023	9/11/2013
EU-42 (Bio Fuel Boiler)	ESP	Particulate	40 CFR 63.7520	Annually	5-8	0.07 lb/mmBtu	0.004 lb/mmBtu	617 mmBtu/hour	CMN20130024	11/21/2013
		SO_2	401 KAR 51:017	5 years	5-8	0.02 lb/mmBtu	0.0029 lb/mmBtu			
		VOC			25A	0.1 lb/mmBtu	0.0052 lb/mmBtu			
		CO	401 KAR 51:017	5 years	10	0.3 lb/mmBtu	0.034 lb/mmBtu			
		NO_X	401 KAR 51:017	5 years	7E	0.2 lb/mmBtu	0.15 lb/mmBtu			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-28 (BPM Smelt Tank No. 3)	Scrubber	Particulate	40 CFR 63.865	5 years	5	0.12 lb/ton BLS	0.0785 lb/ton BLS	49.07 BLS tons/hour	CMN20130025	11/19/2013
		SO_2	401 KAR 51:017		8	0.1 lb/ton BLS	0.0222 lb/ton BLS			
EU-36 (Lime Kiln No. 3)	ESP	Particulate	40 CFR 63.862(a)(1)(i)(C)	5 years	5-8	0.064 gr/dscf @ 10% O_2	0.0063 gr/dscf @ 10% O_2	433.2 CaO tons/day	CMN20130026	12/12/2013
		SO_2	401 KAR 51:017		5-8	73 ppm @10% O_2	0.335 ppm @10% O_2			
		VOC			25A	75 ppm @10% O_2	3.08 ppm @10% O_2			
		CO			10	300 ppm @10% O_2	0.851 ppm @10% O_2			
		NOx			7E	150 ppm @10% O_2	66.8 ppm @10% O_2			
EU-27 (Recovery Furnace No 3)	ESP	Particulate	401 KAR 51:017	5 years	5	0.025 gr/dscf @ 8% O_2	0.020 gr/dscf @ 8% O_2	49.63 BLS tons/hour	CMN20130027	10/24/2013
		NOx			7E	150 ppm @ 8% O_2	82.7 ppm @ 8% O_2			
		SO_2			8	200 ppm @ 8% O_2	0.82 ppm @ 8% O_2			
EU-30 (BPM Smelt Tank No. 4)	Scrubber	Particulate	401 KAR 51:017	5 years	5	0.2 lb/ton BLS	0.1 lb/ton BLS	76.35 BLS tons/hour	CMN20130028	12/10/2013
		SO_2			8	0.1 lb/ton BLS	0.404 lb/ton BLS			
		VOC			25A	0.16 lb/ton BLS	0.0009 lb/ton BLS			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-29 (Recovery Furnace No 4)	ESP	Particulate	401 KAR 51:017	5 years	5	0.044 gr/dscf @ 8% O_2	0.0125 gr/dscf @ 8% O_2	74.2 BLS tons/hour	CMN20130029	10/22/2013
		NO_X			7E	110 ppm @ 8% O_2	89.8 ppm @ 8% O_2			
		SO_2			8	100 ppm @ 8% O_2	0.519 ppm @ 8% O_2			
		CO			10	200 ppm @ 8% O_2	173.8 ppm @ 8% O_2			
		VOC			25A	20 ppm @ 8% O_2	0 ppm @ 8% O_2			
EU-27 (Recovery Furnace No. 3)	ESP	TRS	401 KAR 51:017	5 years	16	5 ppm @ 8% O_2	1.31 ppm @ 8% O_2	47.46 BLS Tons/hour	CMN20130031	9/12/2013
EU-29 (Recovery Furnace No 4)	ESP	TRS	401 KAR 51:017	5 years	16	5 ppm @ 8% O_2	0.41ppm @ 8% O_2	72.38 BLS tons/hour	CMN20130032	9/11/2013
EU-36 (Lime Kiln No. 3)	ESP	TRS	401 KAR 51:017	5 years	16	8 ppm @ 10% O_2, 7.89 tpy	1.89 ppm @ 10% O_2, 2.18 tpy	430.38 CaO ton/day	CMN20130034	12/10/2013
A58-02 (BPM Fire Pond Engine)	None	CO	40 CFR 63 Subpart ZZZZ	Initially	10	230 ppm @ 15% O_2	127.83 ppm	628 HP	CMN20150013	3/31/2015
A58-07 (FPM Fire Pond Engine)	None	CO	40 CFR 63 Subpart ZZZZ	Initially	ASTM D6522	230 ppm @ 15% O2	21.81 ppm @ 15% O2	287 HP	CMN20150015	6/25/2015
EU-19, EU-20, EU-21 (Bleach Plant)	Bleach Plant Scrubber	Chlorinated HAP	40 CFR 63.445(c)	5 years	26A	10 ppm	0 ppm	60.87 ODP tons/hour	CMN20150017	11/10/2015
		ClO_2				0.35 lb/hour	0.35 lb/hour			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-42 (Bio Fuel Boiler)	ESP	Particulate	401 KAR 51:017	Annually	5	0.10 lb/mmBtu	0.00299 lb/mmBtu	656.81 mmBtu/hour	CMN20170001	2/22/2017-2/23/2017
		HCl	Item 1 in table 2 to 40 CFR 63, Subpart DDDDD	Annually OR Every 3 years	26A	0.022 lb/mmBtu	0.000114 lb/mmBtu			
		Hg			30B	5.70×10^{-6} lb/mmBtu	2.47×10^{-7} lb/mmBtu	632.78 mmBtu/hour		
		CO	Item 9 in table 2 to 40 CFR 63, Subpart DDDDD		10	470 ppm @ 3% O_2	42.5 ppm @ 3% O_2			
EU-36 (Lime Kiln No. 3)	ESP	TRS	RATA	Annually	16C	10%	2%	358.91 CaO tons /day	CMN20170015	8/15/2017-8/17/2017
		O2	RATA		3A	1%	0.03%			
EU-27 (Recovery Furnace No. 3)	ESP	TRS	RATA		16C	10%	3.24%	265.191 KPPH steam		
		O2	RATA		3A	1%	0.21%			
EU-29 (Recovery Furnace No 4)	ESP	TRS	RATA		16C	10%	2.84%	457.105 KPPH steam		
		O2	RATA		3A	1%	0.17%			
EU-42 (Bio Fuel Boiler)	ESP	NOx	RATA		7E	10 lb/mmBtu	4.48 lb/mmBtu	314.465 KPPH steam		
		O2	RATA		3A	1%	0.34%			
EU-40 (NCG/SOG incinerator)	Wet Scrubber	Particulate	401 KAR 51:017	As Required	5B	12.8 lb/hour; 56.1 tpy	2.29 lb/hour; 10.03 tpy	59.26 ODP tons/hour	CMN20170016	10/11/2017
EU-27 (Recovery Furnace No 3)	ESP	Particulate	401 KAR 51:017	5 years	5	0.025 gr/dscf @ 8% O_2	0.020 gr/dscf @ 8% O_2	44 BLS tons/hour	CMN20180015	12/3/2018
		NOx			7E	150 ppm @ 8% O_2	44.31 ppm @ 8% O_2			
		SO_2			8	200 ppm @ 8% O_2	103.4 ppm @ 8% O_2			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-27 (Recovery Furnace No 3)	ESP	TRS	401 KAR 51:017	5 years	16	5 ppm @ 8% O_2	1.07 ppm @ 8% O_2	44 BLS tons/hour	CMN20180015	12/3/2018
EU-29 (Recovery Furnace No 4)	ESP	Particulate	401 KAR 51:017	5 years	5	0.044 gr/dscf @ 8% O_2	0.019 gr/dscf @ 8% O_2	67 BLS tons/hour	CMN20180016	11/27/2018
		NO_X			7E	110 ppm @ 8% O_2	70.97 ppm @ 8% O_2			
		SO_2			8	100 ppm @ 8% O_2	1.39 ppm @ 8% O_2			
		CO			10	200 ppm @ 8% O_2	69.72 ppm @ 8% O_2			
		VOC			25A	20 ppm @ 8% O_2	6.322 ppm @ 8% O_2			
		TRS			16	5 ppm @ 8% O_2	0.155 ppm @ 8% O_2			
EU-36 (Lime Kiln No. 3)	ESP	Particulate	40 CFR 63.862(a)(1)(i)(C)	5 years	5	0.064 gr/dscf @ 10% O_2	0.013 gr/dscf @ 10% O_2	19 CaO tons/hr	CMN20180017	11/29/2018
		SO_2	401 KAR 51:017		5-8	73 ppm @10% O_2	3.228 ppm @10% O_2			
		VOC			25A	75 ppm @10% O_2	5.313 ppm @10% O_2			
		CO			10	300 ppm @10% O_2	51.85 ppm @10% O_2			
		NOx			7E	150 ppm @10% O_2	60.9 ppm @10% O_2			
		TRS			16	8 ppm @10% O_2	1.501 ppm @10% O_2			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-40 (NCG/SOG incinerator)	Wet Scrubber	Methanol	40 CFR 63.443(d)	As Required	308	20 ppm @ 10% O_2	1.265 ppm @ 10% O_2	59.38 ADTP/ hour	CMN20180018	11/28/2018
		TRS	401 KAR 51:017		16	0.92 tpy	0.0054 lb/hr			
EU-42 (Bio Fuel Boiler)	ESP	NO_X	401 KAR 51:017	5 years	7E	0.25 lb/mmBtu	0.195 lb/mmBtu	643 mmBtu/hour	CMN20180019	11/30/2018
		SO_2			6C	0.033 lb/mmBtu	0.005 lb/mmBtu			
		VOC			25A	0.10 lb/mmBtu	0.014 lb/mmBtu			
EU-28 (BPM Smelt Tank No. 3)	Scrubber	Particulate	40 CFR 63.865	5 years	5	0.12 lb/ton BLS	0.1031 lb/ton BLS	49.07 BLS tons/hour	CMN20190013	3/20/2019
		SO_2	401 KAR 51:017		8	0.1 lb/ton BLS	0.0404 lb/ton BLS			
		TRS			16C	0.033 lb/ton BLS	0.0268 lb/ton BLS			
EU-30 (BPM Smelt Tank No. 4)	Scrubber	Particulate	401 KAR 51:017	5 years	5	0.2 lb/ton BLS	0.05 lb/ton BLS	76.35 BLS tons/hour		3/12/2019
		SO_2			8	0.1 lb/ton BLS	0.017 lb/ton BLS			
		VOC			25A	0.16 lb/ton BLS	0.0006 lb/ton BLS			
		TRS			16C	0.033 lb/ton BLS	0.0169 lb/ton BLS			

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-59 (Backup Boiler)	None	NO_X- Zero Drift	40 CFR 60.44b(l)	As Required	PS2	2%	0.03%	358.6 MW	CMN20190016	3/18/2019-3/24/2019
		NO_X- Span Drift					0.25%			
		Initial NO_X CEMS			25A	0.2 lb/mmBtu	0.0736 lb/mmBtu			
EU-42 (Bio Fuel Boiler)	ESP	Filterable PM	Item 9 in table 2 to 40 CFR 63, Subpart DDDDD	Annually OR Every 3 years	5	1.1×10^{-1} lb/mmBtu	1.01×10^{-3} lb/mmBtu	311.54 mmBtu/hour Natural Gas 346.87 mmBtu/hr Wood	CMN20200001	2/25/2020-2/26/2020
		CO			10	470 ppmv @3% O_2	122.9 lb/mmBtu			
		HCl	Item 1 in table 2 to 40 CFR 63, Subpart DDDDD		26A	2.2×10^{-2} lb/mmBtu	2.32×10^{-4} lb/mmBtu			
		Hg			30B	5.7×10^{-6} lb/mmBtu	*3.5×10^{-7} lb/mmBtu			
EU-19, EU-20, EU-21 (Bleach Plant)	Bleach Plant Scrubber	ClO_2	40 CFR 63.445(c)	5 years	26A, 40 CFR 63.457 (b)(5)(ii)	3.24 lb/hr	7.3 ppm 0.87 lb/hr 0.0138 lb/ton ODP	63.103 ODP tons/hour	CMN20200018	11/5/2020
		Chlorinated HAP				10 ppmv 0.002 lb/ton ODP	0.00 ppm 0.00 lb/ton ODP			

Footnote:

* CMN20200001; Analytical QC Fail for Hg. Method 30B specifies sampling and analytical QC standards did not meet. Specifically, the Field Recovery Test and Paired Trap Agreement, %Relative Deviation being above specification for all runs.

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
EU-42 (Bio Fuel Boiler)	ESP	Filterable PM	Item 9 in table 2 to 40 CFR 63, Subpart DDDDD	Annually OR Every 3 years	5	1.1×10^{-1} lb/mmBtu	1.29×10^{-2} lb/mmBtu	675.86 mmBtu/hr heat input	CMN20230001	2/2/2023
		CO			10	470 ppmv @ 3% O_2	65.47 ppmv @ 3% O_2			
		HCl	Item 1 in table 2 to 40 CFR 63, Subpart DDDDD		26A	2.2×10^{-2} lb/mmBtu	1.1×10^{-4} lb/mmBtu			
		Hg			30B	5.7×10^{-6} lb/mmBtu	2.96×10^{-7} lb/mmBtu			
EU-30 (BPM Smelt Tank No. 4)	Scrubber	Particulate	401 KAR 51:017	5 years	5	0.2 lb/ton BLS	TBD	TBD*	TBD	TBD
		SO_2			8	0.1 lb/ton BLS	TBD			
		VOC			25A	0.16 lb/ton BLS	TBD			
		TRS			16C	0.033 lb/ton BLS	TBD			

Footnotes:

* Scrubbing liquid flow rate and scrubber pressure drop or fan amperage or RPM will be verified or reestablished by compliance testing.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
3.24 lb/hr of ClO_2	401 KAR 63:021, *Existing sources emitting toxic air pollutants*	Source-wide
358.8 lb/hr of Hydrogen Chloride	401 KAR 63:021, *Existing sources emitting toxic air pollutants*	Source-wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 50:012, *General Application*	EU-09, EU-24, EU-27
401 KAR 51:017, *Prevention of significant deterioration of air quality.*	EU-27, EU-28, EU-29, EU-30, EU-36, EU-40, EU-42, EU-44, EU-45
401 KAR 51:160, *NO_X requirements for large utility and industrial boilers.*	EU-59
401 KAR 51:220, *CAIR NO_X ozone season trading program.*	EU-59
401 KAR 59:010, *New process operations.*	EU-33, EU-37, EU-38, EU-44, EU-45, EU-54
401 KAR 59:015, *New indirect heat exchangers.*	EU-42, EU-59
401 KAR 59:050, *New storage vessels for petroleum liquids.*	EU-10, EU-47
401 KAR 60:005, Section 2(2)(c), 40 C.F.R. 60.40b through 60.49b (Subpart Db), *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.	EU-27, EU-29, EU-42, EU-59
401 KAR 60:005 Section 2(2)(r), 40 C.F.R. 60.110b through 60.117b (Subpart Kb), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.*	EU-48
401 KAR 60:005 Section 2(2)(kk), 40 C.F.R. 60.280 through 60.285 (Subpart BB), *Standards of Performance for Kraft Pulp Mills.*	EU-14, EU-22, EU-27, EU-28, EU-29, EU-30, EU-36, EU-40
401 KAR 60:005 Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.*	A58-11, A58-12
401 KAR 63:002 Section 2(4)(l), 40 C.F.R. 63.440 through 63.459, Table 1 (Subpart S), *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.*	EU-09, EU-14, EU-19, EU-20, EU-21, EU-22, EU-24, EU-40
401 KAR 63:002 Section 2(4)(cc), 40 C.F.R. 63.860 through 63.868, Table 1 (Subpart MM), *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills.*	EU-27, EU-28, EU-29, EU-30, EU-36

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Table B - Summary of Applicable Regulations (Continued):

Applicable Regulations	Emission Unit
401 KAR 63:002 Section 2(4)(hh), 40 C.F.R. 63.960 through 63.967 (Subpart RR), *National Emission Standards for Individual Drain Systems.*	EU-14, EU-22
401 KAR 63:002 Section 2(4)(kkk), 40 C.F.R. 63.2330 through 63.2406, Tables 1 through 12 (Subpart EEEE), *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).*	EU-48
401 KAR 63:002 Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*	A58-02, A58-03, A58-04, A58-05, A58-06, A58-07, A58-08, A58-09, A58-10, A58-11, A58-12
401 KAR 63:002 Section 2(4)(iiii), 40 C.F.R. 63.7480 through 63.7575, Tables 1 through 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.*	EU-42, EU-59
401 KAR 63:010, *Fugitive emissions.*	EU-11, EU-12, EU-57
40 CFR 64, *Compliance Assurance Monitoring.*	EU-27, EU-28, EU-29, EU-30, EU-36, EU-40, EU-42

Table C - Summary of Precluded Regulations:

N/A

Table D - Summary of Non Applicable Regulations:

N/A

Air Toxic Analysis

N/A

Single Source Determination

N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
V-04-012	Initial Title V	APE20040001	10/6/2003	6/2/2005	Initial Title V (not finalized)	PSD
V-04-012 R1	Sig Revision	APE20050002	7/15/2006	9/12/2007	Revisions to address comments on V-04-012	PSD
V-04-012 R2	Admin. Amend	APE20080002	1/22/2009	2/6/2009	Revision to testing frequency	
V-04-012 R3	Minor Revision	APE20090001	3/2/2009	8/6/2009	Fuel Change for No. 3 & 4 Boilers	
V-04-012 R4	Minor Revision	APE20100002	2/19/2010	5/21/2010	Addition of portable log chipper	
V-04-012 R5	Sig Revision	APE20110001	11/2/2011	5/16/2012	Construction and operation of NG fired backup boiler & barge unloading terminal	PSD
V-12-036	Title V Renewal	APE20120001	7/11/2012	7/8/2013	Renewal	
V-12-036 R1	Minor Revision	APE20140002	8/25/2014	11/12/2014	Changes to barge unloading annual operating limit, removal of backup boiler from permit (not constructed)	
V-12-036 R2	Sig Revision	APE20150001	8/31/2015	4/22/2016	Reclassification of fire pump engines, changes to inspection schedule, update of monitoring data averaging for compliance, incorporation of RAP analysis	
V-18-007	Title V Renewal	APE20170004	3/23/2018	9/22/2018	Renewal	Synthetic Minor
	Sig Revision	APE20180003			Significant Revision for the addition of a backup natural gas-fired boiler	

SECTION 6 – PERMIT APPLICATION HISTORY

None

APPENDIX A – ABBREVIATIONS AND ACRONYMS

Admin – Administrative
ADP – Air Dried Pulp
BACT – Best Available Control Technology
BLS – Black liquor solids
BPM – Bleached pulp mill
Btu – British thermal unit
CAM – Compliance Assurance Monitoring
CaO – Calcium oxide
$CaCO_3$ – Calcium carbonate
CO – Carbon Monoxide
Division – Kentucky Division for Air Quality
dscm – dry standard cubic meter
dscf – dry standard cubic foot
ESP – Electrostatic Precipitator
FPM – Fine paper mill
gpm – gallon per minute
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HCl – Hydrochloric acid
HF – Hydrogen Fluoride (Gaseous)
HVLC – high volume low concentration gases
KMM – Kentucky Medium Mill
LVHC – Low volume high concentration gases
Mg – Megagram
mmscf – Million standard cubic feet
mmBtu – Million British thermal unit
NESHAP – National Emissions Standards for Hazardous Air Pollutants
NCG – non-condensable gases
NG – Natural gas
NO_x – Nitrogen Oxides
ODP – Oven dried pulp
PCC – Precipitated calcium carbonate
PM – Particulate Matter
PM_{10} – Particulate Matter equal to or smaller than 10 micrometers
$PM_{2.5}$ – Particulate Matter equal to or smaller than 2.5 micrometers
ppm – Parts per million
ppmv – Parts per million by volume
ppmvd – Parts per million by volume on a dry basis
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit
SO_2 – Sulfur Dioxide
SOG – Stripper off-gases
tpy – Tons per year
VOC – Volatile Organic Compounds

Appendix B – Indirect Heat Exchanger Emissions Limitations

<table>
<tr><td colspan="9">Summary of All Affected Facilities Used to Determine 401 KAR 59:015 Emission Limits</td></tr>
<tr><td>EU</td><td>Fuel(s)</td><td>Capacity (mmBtu/hr)</td><td>Constructed</td><td>Basis for PM Limit</td><td>Total Heat Input Capacity for PM Limit (mmBtu/hr)</td><td>Basis for SO_2 Limit</td><td>Total Heat Input Capacity for SO_2 Limit (mmBtu/hr)</td><td>Notes</td></tr>
<tr><td>46</td><td>Natural Gas</td><td>150</td><td>1969</td><td colspan="4">Unit subject to 401 KAR 61:015</td><td rowspan="3">Removed 2011</td></tr>
<tr><td>07</td><td>Natural Gas Fuel Oil</td><td>400</td><td>1981</td><td colspan="4">Unit subject to 401 KAR 61:015</td></tr>
<tr><td>06</td><td>Fuel Oil</td><td>180</td><td>1985</td><td>401 KAR 59:015, Section 4(1)(b)</td><td>250+</td><td>401 KAR 59:015, Section 5(1)(b)(1)</td><td>250+</td></tr>
<tr><td>27</td><td>BLS; NG; Fuel Oil</td><td>NA</td><td>1985</td><td colspan="4" rowspan="4">Units subject to 40 CFR 60, Subpart Db. See 401 KAR 59:015, Section 2(2).</td><td rowspan="4">Exempt from Sections 3-6 of 401 KAR 59:015</td></tr>
<tr><td>42</td><td>Wood; NG; Fuel Oil;</td><td>570 Wood; 480 NG</td><td>5/1997</td></tr>
<tr><td>29</td><td>BLS; NG; Fuel Oil</td><td>NA</td><td>10/1997</td></tr>
<tr><td>59</td><td>Natural Gas</td><td>358.6</td><td>2018</td></tr>
</table>