ADEQ
OPERATING
AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation No. 26:

Permit No.: 287-AOP-R5

Renewal #1

IS ISSUED TO:

Domtar Industries Inc. – Ashdown Mill
Ashdown, AR 71822
Little River County
AFIN: 41-00002

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

July 19, 2005 AND July 18, 2010

IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Michael Bonds
Chief, Air Division

Date Modified

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Table 1 - List of Acronyms

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound per hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate matter
PM_{10}	Particulate matter smaller than ten microns
SN	Source Number
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur dioxide
SSM	Startup, Shutdown, and Malfunction Plan
TDF	Tire Derived Fuel
Tpy	Ton per year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Section I: FACILITY INFORMATION

PERMITTEE:	Domtar Industries Inc. – Ashdown Mill
AFIN:	41-00002
PERMIT NUMBER:	0287-AOP-R5
FACILITY ADDRESS:	285 Highway 71 South Ashdown, AR 71822
MAILING ADDRESS	285 Highway 71 South Ashdown, AR 71822
COUNTY:	Little River
CONTACT POSITION:	Holly B. Harvey, Environmental Engineer
TELEPHONE NUMBER:	870-898-2711 – Extension 6244
FAX NUMBER:	870-898-6206
REVIEWING ENGINEER:	Phillip Murphy
UTM Zone	15
UTM North - South (Y):	3722.6 km
UTM East - West (X):	399.7 km

Section II: INTRODUCTION

Summary of Permit Activity

The Domtar Industries Inc. - Ashdown Mill operates a Kraft pulp and paper mill (NAICS 322121) on Highway 71 South in Ashdown, Arkansas. This is a permit modification. The permit modifications changed the scrubber parameters for the bleach plant scrubbers (SN-16, SN-17 and SN-18) based on testing, allowed the use of weak wash water in the No. 3 Smelt Dissolving Tank (SN-15), allowed the use of COD instead of BOD_5 for testing of the wastewater treatment facility and deleted the requirement to test the mixed liquor volatile suspended solids.

Process Description

Nos. 2 and 3 Wood yards produce approximately 10,000 total tons of wood chips per day. These chips are fed to the 1A digesters, the 1B digesters, or the Kamyr continuous digester. The 1A digesters produce approximately 800-850 tons of unbleached hardwood each day, as do the 1B digesters. Five digesters serve both the 1 A and 1 B lines.

The No. 2 Pulp Mill uses a continuous Kamyr digester to produce approximately 900-950 tons per day of unbleached pulp. Brown stock washers wash the pulp and send the pulp to the mill's oxygen delignification system. The oxygen delignification system (02 Delig) uses elemental oxygen and oxidized white liquor to break down the lignin in the softwood pulp before the pulp gets to the bleach plant.

The 1A, 1B, and No. 2 Bleach Plants Pulp receive pulp from the 1A, 1B, and No. 2 pulp mills, respectively. The bleach plants primarily use chlorine dioxide to bleach the pulp until it is suitable for making quality paper or pulp. The 1A bleach plant processes approximately 750-800 tons per day of bleached pulp due to losses in bleaching. 1B processes approximately the same tonnage, and the No. 2 Bleach Plant produces about 850-900 tons per day. All this bleached pulp is sent to the pulp dryer or to one of four paper machines.

The pulp dryer produces approximately 450-500 tons per day of either softwood or hardwood market pulp. This pulp is used internally to make paper grades or sold to external customers. The No. 61 Paper Machine produces approximately 350 tons per day of paper; No. 62 produces approximately 600 tons per day; No .63 produces about 575-600 tons per day; and No 64 produces about 1000 tons per day. Paper tonnage also includes fillers used to develop brightness, opaque finish, and other quality metrics in the finished product. The paper from the machines is either sold in roll form or sent to the converting operations. In converting, the paper rolls are processed into 8 x 11" sheets (or other sizes), stacked into reams, and packed into cartons for shipment to outside customers.

Power and Chemical Recovery

Black liquor is a byproduct of cooking the chips in all three pulping lines. The evaporators evaporate water to concentrate the solids in the black liquor (called weak black liquor due to its relatively low dissolved solids content). The recovery boilers burn concentrated black liquor solids. The two recovery boilers burn approximately 4,000 tons of black liquor solids (≈ 55% in No. 3 Recovery, ≈ 45% in No. 2 Recovery) each day.

The molten liquor from the bottom of the recovery boilers is mixed in the dissolving tank with weak wash from the recausticizing area to form green liquor. The green liquor is clarified and mixed with hot lime (CaO) from the two lime kilns in one of two slakers. The liquor and lime react to form calcium carbonate ($CaCO_3$) and sodium hydroxide (NaOH). The NaOH is the primary constituent of white liquor, the chemical used to cook chips in each hardwood and softwood digester. The $CaCO_3$ is sent to the lime kilns where it is calcined, driving off the CO_2 to form CaO to be used in the slaker again. The No. 2 Lime Kiln produces approximately 275-350 tons per day of lime, and the No. 3 Lime Kiln produces about 350-450 tons per day of lime.

Dregs from the green liquor clarifier are washed in order to recover any remaining inorganics that can be used in the chemical recovery process. After washing, the dregs are sent to the lime waste landfill. Approximately 150 tons per day of dregs may be produced each day. Grits from the slaker (gravel, hard-burned lime, etc.) amount to about 8 tons per day and are disposed of in the lime waste landfill.

Fiber not used on the paper machines is sent to the wastewater treatment plant. This fiber is recovered in three wastewater clarifiers and is dewatered using one of three screw presses. The dried fiber (sludge or wastewater treatment plant residual) is sent to an on-site landfill for disposal. Approximately 50 dry tons of sludge are generated daily.

Three power boilers are used in conjunction with the recovery boilers to produce steam used for power generation. The No. 1 Power Boiler burns about 500-650 tons per day of bark from the wood yard. The No. 2 Power Boiler burns about 300 tons per day of bark and 600 tons per day of bituminous coal. The No. 3 Power Boiler burns about 800-1000 tons per day of bark. Steam generation rates average about 120 klbs/hr, 600 klbs/hr, and 200 klbs/hr for Nos. l, 2 and 3 Power Boilers, respectively.

Two package boilers can be used to supplement steam demand during upset conditions or shutdowns of other boilers. Both package boilers are typically used less than 25% of any operating quarter.

Wastewater Treatment System

The mill's process sewers flow to an effluent lift pit, and then pumped to a splitter box. The effluent is then sent to one of three effluent clarifiers for removal of primary sludge. The sludge slurry is sent to the screw presses and the supernatant goes back to the splitter box. The effluent goes through one of the two pre-settling ponds before it enters the first aeration pond. After extensive aeration using surface and sub-surface aerators (68 aerators at 75 hp each), the effluent flows to the second aeration pond which uses 33 aerators to further treat the effluent. After the aeration zones, a quiescent stabilization pond retains the effluent for about three weeks before it is discharged to the Red River. Approximately 55 million gallons of process effluent are discharged each day.

Auxiliary Processes Description

Several auxiliary operations are necessary to maintain the facility. These include steam production for power generation, water, electricity, compressed air, precipitated calcium carbonate for the paper machines, treatment of wastewater, sludge handling, solid and hazardous waste disposal, routine maintenance, painting, road repair, fuel storage, and other chemicals and byproduct loading or unloading activities.

Steam Generation with Power Boilers

The power process consists of generating the steam, electricity, and compressed air for the other processes within the facility. The mill's steam and electricity requirements for the facility are partially met by the steam and power generated in the recovery process. Three (3) power boilers and two (2) package boilers generate additional steam and electricity. The Nos. 1 and 3 Power Boilers burn natural gas, bark, pelletized paper fuel, and tire-derived fuel for steam generation. The No. 1 Power Boiler can also burn No. 6 Fuel Oil and specification grade used oil during natural gas curtailments. The No. 1 Power Boiler's oil system fires periodically to maintain readiness. The No. 2 Power Boiler (Coal Boiler) burns coal, bark, wood waste, No. 6 Fuel Oil, specification grade used oil, natural gas, pelletized paper fuel, tire-derived fuel, and non-condensable gases. The two (2) package boilers, SN-11 and SN-12, burn only natural gas and are used primarily during outages of one of the other boilers. They are also periodically fired to maintain readiness.

Fuel storage for the power area consists of two (2) No. 6 Fuel Oil storage tanks and a smaller day tank. Oil is delivered by tank trucks or tank cars and pumped to either of the storage tanks. The mill adds used oil from the mill's lubricating systems and vehicles to the fuel oil storage tanks. The oil is heated in the tanks and circulated to allow for pumping to the various combustion sources when needed. The oil is then pumped to the day tank before being distributed to the various sources.

Power Generation Emission Points

Each of the boilers emits NO_x, VOC, CO, and PM. The No. 2 Power Boiler also emits SO_2, HCI, and lead due to burning coal. Previous permitting actions established limits for all of these pollutants and testing has been done to demonstrate compliance. The specific results for each unit are discussed in the regulatory applicability sections. The power generation area also has fugitive emissions from storage of boiler water chemicals and steam vents, both of which are considered insignificant based on the Group B list in the permit application form. Other trace organics are emitted from the power boilers due to burning bark and coal. These emissions are quantified based on boiler throughput and NCASI emission factors in separate sections of the application. Emissions from the fuel oil storage tanks have been estimated using AP-42 factors, and are considered insignificant based on Regulation 19, Appendix A-3.

Coal Handling System

The primary fuel in the No. 2 Power Boiler (SN-05) is coal. The coal is normally processed directly from rail cars by shaking the cars to unload the coal into a conveyor system that carries the coal into one of three (3) storage silos operated in parallel. The silos feed coal pulverizers that reduce the large pieces of coal to fine particles suitable for quick combustion in the boiler. The pulverized coal is pneumatically conveyed to the boiler by compressed air. Particulate matter from the coal combustion process is removed by scrubbers and transported to a fly-ash pond by a wet slurry pipeline.

Coal is also stockpiled onsite in an open pile. The coal is transferred from the pile to trucks or railcar with a front end loader or other mobile equipment. The railcars of coal are then sent to the shaker as mentioned previously.

Coal Handling Emissions

Emissions from the coal handling system are fugitive dust from the handling, storage, transportation, and pulverizing of the coal, as well as possible fugitive dust from the ash handling system.

Non-condensable Gas System Process Description

Noncondensable gases (NCG) consist of nitrogen, total reduced sulfur (TRS) compounds, methanol, acetone, sulfur dioxide (SO_2), and minor quantities of other compounds such as methyl ethyl ketone. The gases are produced during the cooking of the chips in the pulp area, as well as in the evaporator area where weak black liquor is concentrated. The gases from the batch digesters (1A and 1B pulp mills), continuous digester (No. 2 Pulp Mill), turpentine system, and evaporator areas are collected and incinerated in either the No. 2 Power Boiler (SN-05, coal boiler) or the No. 2 Lime Kiln (SN-09). The gases may be routed to either source to allow for system repairs or outages on either destruction source. The No. 2 Power Boiler serves as the primary source for NCG destruction, while the No. 2 Lime Kiln serves as the backup source.

The No. 2 Power Boiler is equipped with an SO_2 monitor and two venturi scrubbers to help monitor and control TRS destruction. In accordance with NSPS, Subpart BB, the No. 2 Power Boiler also has a continuous flame pyrometer to measure the temperature at the point of NCG injection. The temperature at the injection point must remain at 1200 ºF at all times that NCG are being sent to the boiler. The No. 2 Lime Kiln has a TRS

monitor to measure any unburned NCG that might make it through the kiln. No temperature monitoring is required under Subpart BB due to the extreme temperatures present in the kiln.

NCG Emissions

The emissions from the NCG system are controlled by incineration. The collection and incineration of the gases result in formation of SO_2. Both the No. 2 Lime Kiln and the No. 2 Power Boiler have wet scrubbers that control these emissions (SO_2 is water-soluble). The No. 2 Power Boiler also monitors SO_2 directly and maintains compliance with its lb/MMBtu and lb/hr limits by the addition of sodium hydroxide and/or bleach plant caustic extract.

Occasionally, one or both of the incineration devices are down, or the system that generates the NCG from the various process areas experiences an upset condition. These failures result in the release of NCG to the atmosphere. When incineration devices vent, the vents from the incineration devices flow through a small pipe attached to the No. 2 Power Boiler stack, and release at the same height as the top of the stack. All NCG vents are reported as required by ADEQ, as well as by 40 CFR 63, Subpart S (Pulp and Paper MACT I).

Chemical Unloading and Loading Process Description

The various chemicals used throughout the facility are received by tank or hopper trucks, rail cars, barrels, tote bins, or other containers. Several unloading areas are located throughout the facility to accommodate the various materials. Bulk chemicals are transported to the appropriate storage vessel by truck or internal switch engine. Unloading the chemicals into vessels consists of direct pumping from the tank car or tank truck to the storage tank, while tote bins and barrels are unloaded with fork trucks. Turpentine, soap, and black liquor are chemical by-products that are stored on-site and shipped from the facility on a regular basis.

Chemical Unloading and Loading Emission Points

Primary emissions from the chemical unloading areas are fugitive in nature. Emissions have been quantified for the various tanks and the unloading processes associated with them by using NCASI or other established factors. Emissions from the tote bins and barrel handling are considered insignificant and have not been quantified. Emissions from the black liquor and soap handling are also considered insignificant based on the Insignificant Activities Group B list included with this application. Turpentine emissions from the storage tank and decanter have been quantified using AP-42 or NCASI factors.

Raw Water Treatment Process Description

Water from Millwood Lake is delivered to the Ashdown Mill through an open canal. The water is clarified with alum and caustic in one of three accelerators (clarifiers). Process water is then filtered and sent to one of two clear wells that are covered with plastic floating tops.

Chlorine dioxide is added inline to the water for disinfection. This addition does not cause any substantial emissions because it takes place within the piping after clarification. Other specialty chemicals are added for the portion of the raw water that is used as boiler feed water.

The water treatment plant also houses the high-pressure water pumps used for firefighting. The pumps can run on diesel fuel as a backup during electrical failures, and the diesel fuel is stored in four tanks throughout the area. Pumps and generators are classified as insignificant based on Group B listings in the application form.

Raw Water Treatment Emission Points

The primary emissions from the raw water treatment facility are fugitives from chemical and diesel storage tanks. All emissions from the raw water treatment area are considered insignificant.

Wastewater Treatment Process Description

Wastewater from all of the manufacturing areas of the mill are collected and routed to a pumping station (lift pit) and then to a splitter box where the flow is directed to one of three (3) clarifiers operating in parallel for primary clarification. An emergency generator is used to power the pumps only during electrical outages. The bleach plant acid and caustic sewers, as well as foul condensate sewers, are not routed to the clarifiers. The bleach plant sewers bypass the clarifiers and enter the wastewater treatment system downstream from the clarifier discharge, and the foul condensate sewers are hard-piped and sent directly into the first aeration pond of the wastewater treatment system.

Sludge removed in the primary clarifiers is pumped to one of three (3) screw presses where it is thickened to approximately 50% solids. The presses are housed inside a building and are considered insignificant sources. The de-watered sludge is hauled to an on-site, permitted landfill for disposal.

After leaving the clarifiers, wastewater flows to either the north or south pre-settling pond (approximately 15 acres each). These ponds serve to remove solids not removed by the clarifiers, and to prevent settling in the aeration ponds. Under normal circumstances, only one settling pond is in service at a time, but occasionally both ponds will be in service, or the wastewater will bypass the ponds altogether and go directly to the first aeration pond.

Wastewater flows from the settling ponds to the first aeration basin which is approximately 125 acres in total surface area. Mechanical aerators are installed in this basin for aerobic treatment of the wastewater. The water flows from the first aeration basin to the second aeration basin which is approximately the same size. Further aeration takes place in this basin, though less aerators are used, and there is a quiescent zone where no aeration takes place. From the second basin, wastewater flows into the final stabilization pond. The final pond is approximately 500 acres in surface area and has no mechanical aeration. After approximately 30 days in the wastewater treatment system, the water is discharged to the Red River through a partially concreted canal.

Wastewater Treatment Emissions

The emissions from the wastewater treatment system are fugitive from the lift pit, splitter box, clarifiers, sludge dewatering system, landfill, settling ponds, and aeration ponds. The largest emissions are from the aeration basins and consist primarily of methanol. Modeling using NCASI's Organic Compound Elimination Pathway Model (NOCEPM) was conducted to establish the current permit limits for the wastewater treatment system. Fugitive emissions from the landfill have been calculated using chemical concentrations and mass balances. A detailed section for the emissions from these areas is included.

Wood Waste Reclamation

A wood waste reclamation system reclaims oversized (reject) wood from the wood yards and processes the wood for use as fuel in any of the three power boilers. The wood is ground with a tub grinder and hauled to the bark piles for conveying into the boilers. Emissions from the wood waste reclamation system are fugitive dusting and combustion byproducts from the tub grinder's engine.

Precipitated Calcium Carbonate System

Lime is brought in by rail or truck and stored in silos. The precipitated calcium carbonate (PCC) plant scrubs carbon dioxide from either the No. 2 or No. 3 Lime Kiln flue gas to manufacture PCC. The process involves scrubbing the flue gases to remove particulate, cooling the gases to maintain product quality, and reacting the gas with slaked lime to produce PCC. The PCC is then stored in tanks in the paper machine area so that it can be pumped to the paper machines as needed.

PCC Emissions

The PCC plant is not a combustion source and testing has shown that NO_x and VOC emissions are actually decreased as they are processed through the calcium carbonate production process. Testing for TRS and SO_2 on similar plants has shown reductions as high as 80%. Particulate emissions from each lime kiln are also reduced in the primary scrubbers and the subsequent scrubbing in the PCC process. The only emissions that can actually be created in the PCC area are particulates. Because of the large reduction in particulate from the primary scrubbers, the net effect on particulate emissions is a large reduction.

Emission limits have been put in place through previous permits, and stack testing is conducted once every five years to demonstrate compliance with environmental limits. The last tests showed the carbonators to be in full compliance with permitted limits.

Maintenance Processes

Maintenance activities are an essential part of efficient operation of the equipment in the mill. These activities are on going throughout all areas of the facility and range from minor repairs by one mechanic to extended shutdowns requiring several days and extensive manpower. Maintenance also assumes responsibility for upkeep of the yards, roads, and parking lots located on the mill site.

Painting is done by an outside contractor who maintains a shop area on the facility's property. The painting operation generates hazardous waste that is stored onsite in accordance with the mill's hazardous waste procedures. The mill is a small quantity generator of hazardous waste.

Maintenance Emissions

Emissions generated in the maintenance process consist mainly of fugitive VOC from lubricants, degreasers, solvents, surfactants, and adhesives. Welding, sandblasting, and demolition activities also emit some fugitive emissions. Repairs to pipes, valves, and tanks may result in the release of small amounts of chemicals. Hazardous waste storage is limited to containers of 55 gallons or less and any emissions from the area are fugitives generated in the transfer process.

Mill Trash and Sludge Landfill Emissions

Emissions from the mill trash and sludge landfills consist entirely of fugitive dust and some organics from the sludge. The dust is generated from vehicle traffic over a dirt road approximately 0.45 miles long. A round trip consists of 0.9 miles and an estimated 37 trips per day are made on the road. The organic emissions are from the trace quantities of methanol and other organics remaining in the sludge after dewatering. Because the bleach plant sewers enter the wastewater treatment system after sludge is removed, no organics from those sources are present in the sludge.

Regulations

The following table contains the regulations applicable to this permit.

Table 2 - Regulations

Source No.	Regulation Citations
Facility	Arkansas Air Pollution Control Code, Regulation No. 18
Facility	Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation No. 19
Facility	Regulations of the Arkansas Operating Air Permit Program, Regulation No. 26
SN-01	40 CFR 60, Subpart Db and 40 CFR 63, Subpart DDDDD. It is also subject to 40 CFR 52, Subpart A.
SN-02, SN-05, SN-06, SN-08, SN-09, SN-14 and SN-15	40 CFR 60, Subpart BB
SN-05	40 CFR 60, Subpart D and 40 CFR 63, Subpart DDDDD
SN-12	40 CFR 60, Subpart Db and 40 CFR 63, Subpart DDDDD
SN-16, SN-17, SN-18 and SN-46	40 CFR 63 Subpart S (MACT I)
SN-02, SN-06, SN-08, SN-09, SN-14 and SN-15	40 CFR 63, Subpart MM

The following table is a summary of emissions from the facility. The following table contains cross-references to the pages containing specific conditions and emissions for each source. This Table, in itself, is not an enforceable condition of the permit.

Table 3 – Emission Summary

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
Total Allowable Emissions		PM	675.9	3158.5	N/A
		PM_{10}	675.9	3158.5	
		SO_2	3079.6	8063.8	
		VOC	736.7	2785.4	
		CO	2953.2	12251.7	
		NO_X	1858.3	7841.0	
		Pb[1]	0.03	0.10	
		TRS[1]	25.40	118.5	
HAPs		Acetaldehyde*	2.47	451.24	N/A
		Benzene*	1.15	5.05	
		Chloroform*	23.30	101.89	
		Formaldehyde*	3.21	14.08	
		Hydrogen Chloride[1]	111.45	488.20	
		Methanol*	114.48	528.15	
		Naphthalene*	1.00	4.38	
		Styrene*	0.27	1.20	
		Toluene*	0.02	0.09	
Air Contaminants **		Acetone[1]	16.3	10.86	N/A
		Ammonia[1]	103.1	71.5	
		Barium	1.12	4.92	
		Chlorine[1]	6.30	27.66	
		Chlorine Dioxide[1]	8.00	30.68	
		Phosphoric Acid	0.01	0.10	
		Sulfuric Acid[1]	7.52	32.94	

*HAPs included in the VOC totals are indicated by an *. Other HAPs are not included in any other totals unless specifically stated.
**Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not classified as VOCs or HAPs.

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
01	No. 3 Power Boiler	PM	19.8	86.5	25
		PM_{10}	19.8	86.5	
		SO_2	62.0	271.6	
		VOC	21.3	93.3	
		CO	276.5	1211.1	
		NO_X	237.0	1038.1	
		Acetaldehyde	0.21	0.92	
		Benzene	0.21	0.92	
		Naphthalene	0.50	2.19	
02	No. 3 Lime Kiln	PM	8.6	37.7	31
		PM_{10}	8.6	37.7	
		SO_2	13.3	58.3	
		VOC	14.6	63.9	
		CO	55.0	240.9	
		NO_X	66.5	291.3	
		TRS	1.34	5.9	
		Benzene	0.24	1.06	
		Methanol	1.31	5.74	
03	No. 1 Power Boiler	PM	343.0	1504.1	38
		PM_{10}	343.0	1504.1	
		SO_2	1285.0	214.0	
		VOC	43.0	214.6	
		CO	164.0	718.3	
		NO_X	247.5	1085.9	
		Acetaldehyde	0.84	3.68	
		Barium	0.77	3.38	
		Benzene	0.49	2.15	
05	No. 2 Power Boiler	PM	82.0	359.2	42
		PM_{10}	82.0	359.2	
		SO_2	983.0	4305.5	
		VOC	92.0	206.5	
		CO	266.0	1165	
		NO_X	574.0	2514.1	
		Pb	0.03	0.10	
		Acetaldehyde	0.21	0.92	
		Benzene	0.21	0.92	
		HCl	5.75	25.19	
		Naphthalene	0.50	2.19	

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
06	No. 2 Recovery Boiler	PM	84.4	369.7	48
		PM_{10}	84.4	369.7	
		SO_2	286.0	1252.7	
		VOC	46.7	204.6	
		CO	980.0	4292.4	
		NO_X	309.2	1354.3	
		TRS	7.4	32.4	
		Formaldehyde	0.72	3.16	
		HCl	51.20	224.30	
		Methanol	1.18	5.17	
		Sulfuric Acid	3.22	14.10	
		Styrene	0.06	0.27	
08	No. 2 Smelt Tank Vents	PM	18.0	78.8	55
		PM_{10}	18.0	78.8	
		SO_2	10.6	46.4	
		VOC	9.3	40.7	
		TRS	2.1	9.2	
		Ammonia	40.0	175.2	
		Formaldehyde	0.36	1.56	
		Methanol	5.40	23.66	
09	No. 2 Lime Kiln	PM	51.0	223.4	61
		PM_{10}	51.0	223.4	
		SO_2	16.7	73.2	
		VOC	17.1	74.9	
		CO	55.0	240.9	
		NO_X	68.6	300.5	
		TRS	8.00	35.00	
		Benzene	0.23	1.01	
		Methanol	1.18	5.17	
		Formaldehyde	0.02	0.09	
		Toluene	0.02	0.09	
11	No. 2 Package Boiler	PM	0.6	2.6	68
		PM_{10}	0.6	2.6	
		SO_2	0.2	0.9	
		VOC	0.3	1.3	
		CO	25.4	111.3	
		NO_X	27.4	120.0	

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
12	No. 3 Package Boiler	PM PM_{10} SO_2 VOC CO NO_X	0.5 0.5 0.1 0.3 6.4 16.0	2.2 2.2 0.4 1.0 28.0 70.1	70
14	No. 3 Recovery Boiler	PM PM_{10} SO_2 VOC CO NO_X TRS Formaldehyde HCl Methanol Styrene Sulfuric Acid	93.5 93.5 425.0 137.0 856.0 270.0 6.6 0.87 54.50 0.46 0.07 4.20	409.5 409.5 1861.5 600.1 3749.3 1182.6 28.9 3.82 238.71 2.02 0.31 18.40	73
15	No. 3 Smelt Dissolving Tank	PM PM_{10} SO_2 VOC TRS Ammonia Formaldehyde Methanol	18.7 18.7 5.1 9.9 1.6 45.00 0.58 0.34	81.9 81.9 22.3 43.5 7.0 197.10 2.55 1.49	80
16, 17, and 18	No. 1A Bleachplant Vents No. 1B Bleachplant Vents No. 2 Bleachplant Vents	CO Chlorine ClO_2 Chloroform	240.4 6.00 4.00 16.50	1053.0 26.36 17.58 72.29	85
20	ERCO ClO_2 Generator	Chlorine ClO_2	0.3 3.0	1.30 13.10	89
21	Effluent Treatment Lagoons	VOC Chloroform Formaldehyde Methanol	12.8 6.80 0.46 5.50	55.7 29.6 2.02 24.0	90

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
22	No. 1A and 1B Brownstock Washer Vents	VOC Acetone Formaldehyde Methanol	59.2 8.80 0.20 59.0	259.1 38.60 0.88 258.2	93
23	Methanol Storage Tank	VOC Methanol	1.0 0.91	4.0 4.00	95
25	Nutrient Storage Tank	H_3PO_4	0.01	0.10	
26	Sulfuric Acid Tanks	H_2SO_4	0.10	0.44	
28	Formic Acid Tanks	Formic Acid	0.20	0.90	
29	Recausticizer Vents	VOC Acetaldehyde Ammonia Methanol	3.0 0.51 18.0 2.40	12.8 2.24 78.8 10.52	98
30 31 32 33 34 35	PCC Carbonators Nos. 1, 2, 3, 4, 5 and 6 Combined	PM PM_{10} SO_2 VOC CO NO_X	4.8 5.4 2.4 12.6 54.6 65.4	N/A[2] N/A[2] N/A[2] N/A[2] N/A[2] N/A[2]	99
36	Weak Black Liquor Tanks	VOC TRS Methanol	7.3 0.1 6.30	32.0 0.5 27.60	101
37	Pulp Dryer	VOC Acetaldehyde Methanol	4.7 0.70 2.60	20.5 3.10 11.40	102
38	No. 2 and No. 3 Woodyards	VOC	123.0	540.0	103
40	No. 1A and No. 1B Digester Chip Fill Exhausts	VOC TRS Methanol	10.0[3] 2.02[3] 5.75[3]	44.0 8.80 25.1	104
41	Sludge Landfill	VOC Methanol	11.6 0.28	51.0 1.23	106

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	tpy	
42	No. 2 Decker	VOC Acetone Methanol	5.6 7.50 3.30	24.5 32.90 10.10	107
43	Tub Grinder	PM PM_{10} SO_2 VOC CO NO_X	0.9 0.9 1.1 0.5 8.0 12.0	2.9 2.9 4.8 1.6 25.8 38.7	108
44a	Paper Machine 61	VOC	2.4	10.6	110
44b	Paper Machine 62	VOC Methanol	4.7 4.00	20.6 17.52	
44c	Paper Machine 63	VOC Methanol	5.6 5.60	24.6 24.53	
44d	Paper Machine 64	VOC Methanol	6.8 6.80	29.8 29.80	
45	Oxygen Delignification System	VOC CO Methanol	9.1 16.5 9.11	39.9 72.3 39.90	113

[1]These emissions are not included in any of the criteria pollutant emission rates.
[2]No annual rates have been given for the PCC Carbonators because they are included in the annual emissions for SN-02.
[3]These rates have been changed from pounds/day in the previous permit.

Section III: PERMIT HISTORY

Nekoosa-Edwards Paper Company originally constructed the facility from 1966 to 1968 and began operation in July 1968. The facility registered with ADEQ in 1968. Original equipment included the No. 1 Power Boiler (SN-03), the No. 1 Recovery Boiler (no longer in service as a recovery boiler), and the No. 1 Smelt Dissolving Tank (no longer in service). Nekoosa-Edwards Paper Company amended the registration in 1970 to include the No. 1 Package Boiler (no longer in service).

Permit 287-A was issued in 1975. This modification included the installation of the No. 2 Power Boiler (SN-05) and the No. 62 Paper Machine.

Permit 287-A was modified in 1978 to include the No. 2 Recovery Boiler, the No. 2 Smelt Tank Vents, the No. 2 Lime Kiln, the Kamyr digester, a diffusion washer, the No. 2 Evaporators, the No. 2 Bleach Plant, a new pulp dryer, the No. 2 wood yard and the No. 63 Paper Machine. The original pulp dryer and the No. 1 Lime Kiln were shutdown and removed from service. This was a permitting action under the Prevention of Significant Deterioration (PSD) regulations. The Environmental Protection Agency (EPA) reviewed the PSD permitting action.

Permit 287-A was modified a second time later in 1978 to amend the stack height on the recovery boiler from 336 feet to 295 feet.

Permit 287-AR-3 was issued in 1985. This was a PSD permitting action to included installation of the No. 1 Package Boiler (removed from service) and the No. 2 Package Boiler (SN-11). Additionally the capacity of the No. 2 Power Boiler (SN-05) was increased from 500,000 pounds per hour steam to 575,000, the capacity of the No. 2 Recovery Boiler (SN-06) was increased from 3.5 million pounds of black liquor solids (BLS) per day to 4.4 million, and the capacity of the No. 2 Smelt Dissolving Tanks (SN-08) was increased from 45,583 pounds per hour of salt cake to 57,292.

Permit 287-AR-4 was issued on March 24, 1987. This permitting action replaced the No. 1 Package Boiler with the No. 3 Package Boiler (SN-12).

Permit 287-AR-5 was issued June 24, 1987. Permit 287-AR-4 was a PSD permitting action for the replacement of the No. 1 Recovery Boiler and No. 1 Smelt Dissolving Tanks with the No. 3 Recovery Boiler and the No. 3 Smelt Dissolving Tanks.

Permit 946-A was issued on July 14, 1989. This was a PSD permitting action allowing conversion of the old No. 1 Recovery Boiler to the No. 3 Power Boiler (SN-01). Additionally, this permit allowed the installation of the No. 3 Lime Kiln (SN-02).

Georgia-Pacific acquired the permit in 1991.

Permit 287-AR-6 was issued on December 31, 1991. This permitting action allowed an increase in the BLS firing rate in the No. 3 Recovery Boiler.

Permit 287-AR-7 was issued on May 24, 1993. This permitting action consolidated permit 287-AR-6 and permit 946-A and allowed the installation of a precipitated calcium carbonate (PCC) facility.

Permit #287-AOP-R0 was issued on June 1, 1999. The construction of the new bleaching stages for the 1A and the 1B Bleachplants were included in this permit as well as the construction of an oxygen delignification system for the No. 2 Pulp Mill. These projects were necessary for the facility to convert to 100% chlorine dioxide bleaching. Several sources and/or pollutants not previously requiring a permit were listed in the permit. This resulted in an increase in the permitted emissions from this facility. A diesel-powered generator was added to

operate lift pumps that move mill effluent from the lift pit to the wastewater treatment system as an insignificant activity.

Permit #287-AOP-R1 was the second operating permit issued to Georgia-Pacific Corporation - Ashdown Operations under Regulation 26. This modified permit, issued on July 12, 2000, added Tire Derived Fuel (TDF) to the permissible fuels list for the No. 2 Power Boiler and allowed the installation of a new causticizer to the recausticizer vent, spoiler bars in the dryers of the papermachine designated as source SN-44a that increased the speed of the machine by approximately 10 feet per minute, and another hood exhaust fan on the papermachine designated as source SN-44b. Typographical errors were corrected in this permit.

Permit #287-AOP-R2 was issued on June 15, 2001. This modification allowed recycled sanitary products, consisting of cellulose and polypropylene as a fuel for the three Power Boilers. It also allowed a request to maintain flue gas temperatures above a specified minimum temperature only when bark feed rates exceed 10% of the boiler capacity, since natural gas burns with negligible VOC emission rates. A higher consumption rate for fuel oil was allowed for the #1 Power Boiler (SN-01) and the No. 2 Lime Kiln (SN-09) based on the reduced sulfur content of the fuel currently available; SO_2 emissions will be unchanged. The Engineering Department proposed to add a new air-paper separator to an existing cyclone in the converting area that will slow the trim stream and allow the trim to fall out. This was added to the list of insignificant items.

On August 7, 2001, the above permit was officially transferred to Domtar A. W. Corporation.

Permit #287-AOP-R3 was issued on August 8, 2002. This modification was necessary as a result of stack testing that showed that CO emission rates were higher for SN-16 and SN-17 (1A and 1B Bleachplants) and also allowed increased emissions of CO from SN-45, the oxygen delignification system. The BACT review of similar processes elsewhere showed a wide range of CO emissions with no correlation with any known processing factors and no control requirements. CO emissions at other bleach plants ranged from 0.65 lb/ton to 1.4 lb/ton with Domtar on the high side at 1.89 lb/ton. BACT was determined to be “no controls”. The increase in CO of 515.2 tpy required a PSD review that determined concentrations at the plant perimeter were well below the NAAQS.

A CMS for gas scrubber vent gas inlet flow rate was also replaced with an equivalent continuous monitoring of amperage on the induced draft fans based on a letter from EPA/Toxic & Inspection Coordination branch. A diesel-powered generator operated lift pump was added to operate lift pumps that move mill effluent from the inlet canal to the waste water treatment system as an insignificant activity.

Permit #287-AOP-R4 was issued on July 19, 2005.

The permit updated the process descriptions for the three bleachplants (SN-16, SN-17 and SN-18) and applicable regulations reviewed for all sources. Storage tanks with less than 10 tpy of VOC emissions and under 5 tpy of total HAP emissions are under Insignificant Activities.

The renewal permit incorporated the following specifically requested changes:

The High Density Storage Tanks (formerly SN-39) are no longer included in the list of permitted sources. The permit lists the tanks as Insignificant Activities. Facility total emissions were adjusted for this reduction.

The compliance date for the MACT standard (40 CFR, Part 63, Subpart MM) was March 13, 2004. The sources No. 3 Lime Kiln (SN-02), No. 2 Recovery Boiler (SN-06), No. 2 Smelt Dissolving Tank (SN-08), No. 2 Lime Kiln (SN-09), No. 3 Recovery Boiler (SN-14) and No. 3 Smelt Dissolving Tank (SN-15) are affected sources for Subpart MM. SN-02, SN-06, SN-08, SN-09, SN-14 and SN-15 have new specific conditions relating to Subpart MM.

The two lime kilns (SN-02 and SN-09) were connected to the two silo vents to the slaker scrubbers associated with the Recausticizer Vents (SN-29) when the lime kilns are not in operation. Emissions of pollutants from this source remained unchanged.

The renewal permit included a modification to install an additional carbonator to the five PC Carbonators previously permitted (SN-30 through SN-35); the Department authorized the installation in a letter dated May 10, 1996.

The permit allowed the #2 Lime Kiln (SN-09) to use larger quantities of fuel oil as a substitute for natural gas. Domtar submitted data to demonstrate absorption of SO_2 during the calcination process which, is a major factor in removal of SO_2 emissions. The permit omitted a previous requirement for maintaining the ratio of natural gas flow rate to the stack oxygen content within a specified range because of the use of up to 100% fuel oil in the fuel mix allowed in the permit. The permit revised emissions based on current AP-42 factors and maximum usage of residual oil. Domtar will rely on CEMS to operate the kiln to meet the lower permitted emission rates.

The permit allowed changing of the exhaust fans above the paper machines (SN-44a, b, c, and d) to provide false ceilings in order to minimize condensation on the paper rolls.

The Ammonia Storage Tank (formerly SN-24) deleted from permit.

The permit omitted reference to former source SN-46 as part of the pre-bleach washer, as it was actually included in SN-17 emissions.

The permit incorporated permitted limits based on 10% of the heat rating (in tons/24 hours) to establish upper limits. (Plant Wide Conditions Nos. 8 and No. 9) The permit dropped previous requirements for measuring and recording flue gas exit temperatures, as stack test data shows acceptable rates of VOC destruction under normal operating procedures and combustion temperatures. The permit discontinued testing for acetaldehyde and benzene after testing demonstrated the HAPs were below detectable levels. The permit added reprocessed fuel oil as a fuel for the #1 Power Boiler, No. 2 Power Boiler and the #2 Lime Kiln.

Section IV: SPECIFIC CONDITIONS

Source SN-01 - No. 3 Power Boiler

Description

The No. 3 Power Boiler was originally the mill's No. 1 Recovery Boiler, but was converted to a power boiler in 1990-91. Startup as a power boiler was in April, 1991. Due to its design heat input rate (790 MMBtu/hr) and date of installation/construction, the boiler is subject to 40 CFR 60, Subparts A and Db. The No. 3 Power Boiler is also subject to 40 CFR 52, Subpart A.

The No. 3 Power Boiler burns primarily bark with gas used to maintain the header pressure and assist combustion. Under normal operating conditions, the bark feed rate is between 50 and 65 tons per hour, and no gas is necessary to maintain steam requirements. Currently, No. 3 Power Boiler burns no NCGs (noncondensable gases, including TRS and VOCs).

The No. 3 Power Boiler has a moving grate (hydragrate), combustion air system including over fire air, and a two chamber electrostatic precipitators (ESP) for particulate control. The permitted particulate matter emission limit for the unit is 19.8 lb/hr (derived from PSD permitting activity), and a stack test every five years to verify the ESP's performance. The 0.025 lb/MMBtu limit for PM was a result of PSD permitting action.

Specific Conditions

1. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with the PM_{10} condition by testing every five years (Specific Condition #27). The permittee demonstrates compliance with the volatile organic compound emission rates by testing (Specific Condition #28). The permittee demonstrates compliance with the sulfur dioxide emission rates demonstrated by the types of fuel available (Specific Condition #21). The CEMS for CO and NO_X demonstrate compliance with the carbon monoxide and the oxides of nitrogen emission rates. [Regulation No. 19 §19.501 *et seq.* effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Table 4– SN-01 Maximum Criteria Emission Rates

Pollutant	lb/hr	Tpy
PM_{10}	19.8	86.5
SO_2	62.0	271.6
VOC	21.3	93.3
CO	276.5	1211.1
NO_X	237.0	1038.1

2. The permittee will not exceed the emission rates in the following table. The lb/MMBtu rates for CO apply only after the boiler has reached stable operating conditions after increasing to a production rate greater than 250,000 lb/hr of steam. Compliance with the lb/MMBtu emission rates for carbon monoxide demonstrated by recording the amount of fuel used during applicable periods each day, multiplying by the appropriate heating value, totaling the Btu input for the period and dividing by the number of hours of stable steam production. For determining the CO emission rate, the permittee will use only the hours of stable steam production above 250,000 lb/hr. A steam production monitor will

establish operational periods when stable rates are above 250,000 lb/hr. Compliance with the permitted emission rates for specific pollutants demonstrated by compliance with the testing requirements of Specific Conditions #12, #20, and #27, the fuel limitations of Specific Conditions #21, #23 and #25, and the control limitation of Specific Condition #24. [19.901 *et seq.* of Regulation 19 and 40 Code of Federal Regulations (CFR), Part 52, Subpart E]

Table 5 – SN-01 Emission Limits lb/MMBtu

Pollutant	Emission Limit
PM	0.025 lb/MMBtu
SO_2	0.100 lb/MMBtu
VOC	0.027 lb/MMBtu
CO	0.35 lb/MMBtu
NO_x	0.30 lb/MMBtu

3. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with the PM emission rate by testing every five years (Specific Condition #27). Testing indicated compliance with the acetaldehyde, benzene and naphthalene emission rates. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 6 – SN-01 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	Tpy
PM	19.8	86.5
Acetaldehyde	0.21	0.92
Benzene	0.21	0.92
Naphthalene	0.50	2.19

4. Power Boiler No. 3 (SN-01) is subject to 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart Db, "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" due to installation after June 19, 1984, and a heat input capacity greater than 100 MMBtu/hr. A copy of Subpart Db is included in Appendix A of this permit. Specific Conditions #5 through #19 contain the applicable provisions of Subpart Db.

5. Particulate matter emissions will not exceed 0.1 lb/MMBtu while combusting wood waste. (Note: The permittee is restricted to a lower rate of 0.025 lb/MMBtu due to a PSD permitting action.) [40 CFR §60.43b(c)(1) and §19.304 of Regulation 19]

6. The permittee will not exceed 20% opacity (6-minute average), except for one 6 minute period per hour of not more than 27 percent opacity. The continuous opacity monitor verifies compliance with the opacity limit. [40 CFR §60.43b(f) and 40 CFR Part 52, Subpart E]

7. The particulate standard in Specific Condition #5 and the opacity standard in Specific Condition #6 apply at all times except during periods of startup, shutdown or malfunction. [Regulation No. 19 §19.304 and 40 CFR §60.43b(g)]

8. The permittee will not emit in excess of 0.3 lb/MMBtu of NO_x while combusting natural gas with wood. [40 CFR §60.44b(d) and §19.304 of Regulation 19]

9. The NO_x emission standards apply at all times including periods of startup, shutdown or malfunction. [40 CFR §60.44b(h) and §19.304 of Regulation 19]

10. Compliance with the NOx emission standard is determined on a 30-day rolling average basis. [40 CFR §60.44b(i) and §19.304 of Regulation 19]

11. The permittee will install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [40 CFR §60.48b(a), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

12. The permittee will install, calibrate, maintain, and operate a CEMS for measuring the NO_x emissions discharged to the atmosphere and record the output of the system. The permittee uses a CO_2 monitor as the diluent monitor. A copy of the CEMS conditions is included in Appendix B of this permit. [40 CFR §60.48(b), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

13. The permittee will record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood for each calendar quarter. The annual capacity factor is determined on a twelve-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR §60.49b(d) and §19.304 of Regulation 19]

14. The permittee will maintain records of opacity. The Department can use the records for enforcement purposes. The permittee will keep the records on-site and make the records available upon request from Department personnel. [40 CFR §60.49b(f) and §19.304 of Regulation 19]

15. The permittee will maintain records of the following information for each steam generating unit operating day:

    a. Calendar date.

    b. The average hourly nitrogen oxides emission rates (expressed as NO_2) (ng/J or lb/MMBtu heat input) measured or predicted.

    c. The 30-day average nitrogen oxides emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding thirty steam generating unit operating days.

    d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emission standards under §60.44b, with the reason for such excess emissions as well as a description of corrective actions taken.

e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective action taken.

f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

g. Identification of "F" factor used for calculations, method of determinations, and type of fuel combusted.

h. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

i. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1. [40 CFR §60.49b(g) and §19.304 of Regulation 19]

16. The Department can use the records for enforcement purposes. The permittee will keep the records on-site and make the records available upon request. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

17. The permittee is required to submit excess emission reports for any calendar quarter during which there are excess emissions of NO_X from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator will submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(g) and §19.304 of Regulation 19]

18. The permittee will submit a quarterly report containing the information recorded under 40 CFR §60.49b(g) for nitrogen oxides under §60.48b All quarterly reports must be postmarked by the 30th day following the end of each calendar quarter. The report will contain the information recorded under Specific Condition #15. [40 CFR §60.49b(i) and §19.304 of Regulation 19]

19. The permittee will maintain all records required under this section for a period of 2 years following the date of such record. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. [40 CFR §60.49b(o) and §19.304 of Regulation 19]

20. The permittee will install, calibrate, maintain, and operate a CEMS for measuring the CO emissions discharged to the atmosphere and record the output of the system. Appendix B contains a copy of the ADEQ CEMS conditions. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

21. The permittee will use only the following fuels to fire this source: bark including bark and wood chips used to absorb oil spills, wood waste, pelletized paper fuel, recycled sanitary products composed of cellulose and polypropylene, natural gas and tire derived fuel (TDF). Plant Wide Condition #14 establishes plant wide limits on the 24-hour usage of TDF. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and 40 CFR Part 52, Subpart E]

22. If the permittee isolates a chamber of the ESP for repair, the permittee may operate the boiler. Readings from the Continuous Opacity Monitor will demonstrate compliance with the emission rates. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

23. If both chambers of the ESP must shutdown for repair at the same time, natural gas is the only fuel allowed to fire the No. 3 Power Boiler. Readings from the Continuous Opacity Monitor will demonstrate compliance with the emission rates. The permittee will note in the operating record times when both ESPs are shutdown for maintenance. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

24. The dual chamber ESP operates for control of particulates and is a Pollutant Specific Emission Unit (PSEU) under the applicability requirements of CAM. The CAM plan requires continuous monitoring of the opacity using the COM. Quality Assurance for the CEMS used for measurement of particulates is in Appendix B. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 64.2(a)(1), (2) and (3)]

25. The heat input to source SN-01 will not exceed 790 MMBtu/hr. The use of the following heating values of each fuel, as described in Specific Condition #26, determines the total heat input to the boiler: [§19.705 *et seq.* of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Table 7 – SN-01 Fuel BTU Values

Fuel	BTU Value
Natural Gas	1.02 MMBtu per 1000 SCF
Bark and Wood Waste	8.50 MMBtu per ton
Pelletized Fuel	16.0 MMBtu per ton
Tire Derived Fuel	27.0 MMBtu per ton

26. The permittee will demonstrate compliance with the heat input limit in Specific Condition #25 by recording the amount of each fuel used each operating day, multiplying the amount of each fuel used by the appropriate heating value, totaling the Btu value, and dividing by twenty-four. The value for each day will be averaged with the other days in a calendar month and a twelve-month rolling average calculated at the end of each month. The permittee will update the records daily, keep the records on-site, and make the records available to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision No. 7. [§19.705 and §19.901 *et seq*. of Regulation 19 and 40 CFR Part 52, Subpart E]

27. The permittee will test source SN-01 every five years for particulate matter using EPA Reference Methods 5 and 202. The PM_{10} test will use either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will conduct all tests in accordance with Plant Wide Condition #3. This test will take place with the maximum rate of bark or wood waste fuel and with a minimal amount of natural gas fuel in the boiler. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

28. The permittee will test source SN-01 every five years for volatile organic compound emissions using EPA Reference Method 25A. The permittee will conduct all tests in accordance with Plant Wide Condition #3. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

29. The carbon monoxide limit is a thirty-day rolling average. Days when the unit is not operating are not included in the thirty-day rolling average. The permittee will maintain a thirty-day rolling average and a twelve-month rolling average. The permittee must update the records no later than the fifteenth day following the last day the 30-day rolling average that the records represent, keep the records on-site, and make the records available to Department personnel upon request. The permittee will submit to the Department each 30-day average and a 12-month rolling average pursuant General Condition #7 [§19.501 *et seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

Source SN-02 - No. 3 Lime Kiln

Description

Lime mud, which is primarily calcium carbonate, is sent to the lime kiln for calcining (removal of CO_2) and reuse in the reaction with green liquor. The No. 3 Lime Kiln (SN-02), last modified in 1991, is natural gas fired with a heat input capacity of 153 MMBtu/hr. Non-condensable gases may not be incinerated in the No. 3 Lime Kiln.

An electrostatic precipitator controls particulate matter emissions from this source. CEMS monitor the TRS and the CO emissions from the No. 3 Lime Kiln. A continuous opacity monitor (COM) is also located at this source.

Stack gas from this lime kiln feeds the Precipitated Calcium Carbonate (PCC) plant. Because emissions from this source will be lower when the PCC plant is in operation, the annual emissions from the PCC plant have been included in the annual emissions for the No. 3 Lime Kiln.

During shutdown periods, the two lime silos for SN-02 and SN-09 will be connected to the slaker scrubbers instead of the lime kilns while the kilns are inspected and repaired.

Due to its date of installation (1991), this source is subject to 40 CFR Part 60, Subpart BB, "Standards of Performance for Kraft Pulp Mills." The source is also subject to 40 CFR Part 63, Subpart MM—"National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills". Since the source is subject to a MACT, the CAM rule does not apply. Fuel to air ratios are continuously monitored and adjusted to maximize heat input and limit emissions, but this is not considered a control device, although it is a preventive measure. Permit opacity limits, annual particulate emission rates and emission limits in terms of lb/MMBtu of particulates represent the required emission limitations.

Specific Conditions

30. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with PM_{10} limits by proper operation of the ESP and testing in Specific Condition #46. The permittee demonstrates compliance with the sulfur dioxide emission rates by firing natural gas at this source (Specific Condition #45). A minimum solids content of the lime mud demonstrates compliance with the volatile organic compounds emission rate (Specific Condition #49) and testing required in Specific Condition #45. CEMS (Specific Condition #44) show compliance with the carbon monoxide rates. The calculation in Specific Condition #51 demonstrates compliance with the oxides of nitrogen emission rates. [Regulation No. 19 §19.501 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 8 – SN-02 Maximum Criteria Emission Rates

Pollutant	Lb/hr	tpy
PM_{10}	8.6	37.7
SO_2	13.3	58.3
VOC	14.6	63.9
CO	55.0	240.9

Pollutant	Lb/hr	tpy
NO_X	66.5	291.3

31. The permittee will not exceed the emission limits in the following table. The rates below, with the exception of the PM rate, apply only when the lime kiln produces at least 100 tons per day. The permittee is responsible for maintaining production records (Specific Condition #63.a) to demonstrate when the emission rates apply. The permittee will demonstrate compliance with the PM limit by proper operation of the ESP. The permittee demonstrates compliance with the sulfur dioxide emission rates by firing natural gas at this source (Specific Condition #45). A minimum solids content of the lime mud (Specific Condition #49) demonstrates compliance with the volatile organic compounds emission rate. CEMS show compliance with the carbon monoxide rates (Specific Condition #44). The permittee will demonstrate compliance with the TRS by the use of a TRS CEMS (Specific Condition # 36). [§19.901 *et seq.* and 40 CFR Part 52, Subpart E]

Table 9 – SN-02 PSD Emission Limits

Pollutant	Emission Limit
PM	0.034 gr/dscf**
SO_2	0.727 lb/ton of lime
VOC	0.795 lb/ton of lime
CO	3.0 lb/ton of lime
NO_x	3.63 lb/ton of lime
TRS**	8 ppmv (dry basis)
**Corrected to 10% Oxygen.	

32. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with this condition by the use of a TRS CEMS (Specific Condition # 36). The permittee will demonstrate compliance with the PM limits by proper operation of the ESP. Previous testing demonstrated compliance with the benzene and methanol limits. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-301].

Table 10 – SN-02 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	8.6	37.7
Benzene	0.24	1.06
Methanol	1.31	5.74

Pollutant	lb/hr	tpy
TRS	1.34	5.9

33. The No. 3 Lime Kiln (SN-02) is subject to 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart BB, "Standards of Performance for Kraft Pulp Mills" due to commencement of construction after September 24, 1976. Appendix C of this permit is a copy of Subpart BB. Specific Conditions #34 through #41 contain the applicable provisions of Subpart BB. [Regulation No. 19 §19.304 and 40 CFR §63, Subpart BB]

34. PM emissions will not exceed 0.066 gr/dscf corrected to 10 percent oxygen when burning gaseous fossil fuel. (Note: 40 CFR §63.862(a)(i)(C) requires a 0.064 gr/dscf) [40 CFR §60.282(a)(3)(i), 40 CFR §63.862(a)(i)(C) and §19.304 of Regulation 19]

35. Total reduced sulfur emissions from source SN-02 will not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen. [[Regulation No. 19 §19.304, 40 CFR §60.283(a)(5), and Regulation 19 §19.804]

36. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of the TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged to the atmosphere from source SN-02. Appendix B contains a copy of the ADEQ CEMS conditions. The permittee must locate the CEMs downstream of the control device and set the spans of the CEMs as stated below. The permittee previously demonstrated that the CEMs meet the required spans. The permittee must notify the Department in writing before modifying either monitoring system. [40 CFR §60.284(a)(2), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

    a. TRS concentration of 30 ppm for the TRS continuous monitoring system, and

    b. At 25 percent oxygen for the continuous oxygen monitoring system.

37. The permittee will calculate and record on a daily basis twelve-hour average TRS concentrations for the two consecutive periods of the operating day. The permittee will determine each twelve-hour average as the arithmetic mean of the appropriate twelve contiguous one-hour average total reduced sulfur concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2). The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. [40 CFR §60.284(c)(1) and §19.304 of Regulation 19]

38. The permittee will calculate and record on a daily basis twelve-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-02. The twelve-hour averages will correspond to the twelve-hour average TRS concentrations under 40 CFR §60.284(c)(1) and determined as an arithmetic mean of the appropriate twelve contiguous one-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. [40 CFR §60.284(c)(2) and §19.304 of Regulation 19]

39. The permittee will correct all twelve-hour average TRS concentrations to ten volume percent oxygen using the following equation: [40 CFR §60.284(c)(3) and §19.304 of Regulation 19]

$$C_{corr} = C_{Meas} * \left(\frac{(21 - X)}{(21 - Y)} \right)$$

where:

C_{corr} = the concentration corrected for oxygen

C_{meas}= the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 10 percent

Y = the measured 12-hour average volumetric oxygen concentration

40. For the purposes of reports required under §60.7(c), the permittee will report semiannually periods of excess emissions from source SN-02. Periods of excess emissions are 12-hour average TRS concentrations above 8 ppm by volume. [40 CFR §60.284(d)(2) and §19.304 of Regulation 19]

41. The Director will not consider periods of excess emissions reported under 40 CFR §60.284(d) to be indicative of a violation of §60.11(d) provided that the Director determines the affected facility, including air pollution control equipment, is maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. [40 CFR §60.284(e) and §19.304 of Regulation 19]

42. Visible emissions may not exceed the limits specified in the following table as measured by EPA Reference Method 9. The COMS for this source demonstrates compliance with this condition.

Table 11 – SN-02 Visible Emissions

SN	Limit	Regulatory Citation
02	20%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

43. The permittee will install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere from source SN-02. Appendix B contains a copy of the ADEQ CEMS conditions. [§19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

44. The permittee will install, calibrate, maintain, and operate a CEMS for measuring CO emissions. A copy of the CEMS conditions is in Appendix B of this permit. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

45. The permittee will test source SN-02 every five years for volatile organic compound emissions using EPA Reference Method 25A. The permittee will conduct all tests in accordance with Plant Wide Condition #3. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

46. The permittee will test source SN-02 every five years for particulate matter using EPA Reference Methods 5 and 202. The PM_{10} test will use either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will conduct all tests in accordance with Plant Wide Condition #3. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

47. Pipeline quality natural gas will be the only fuel used to fire the No. 3 Lime Kiln. The permittee demonstrates compliance with the sulfur dioxide emission rates by firing natural gas at this source. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6 and 40 CFR Part 52, Subpart E]

48. The permittee will operate the No. 3 Lime Kiln at a maximum of 75% of the kiln's rated capacity when isolating one pre-coat filter for cleaning. The use of a CEMS will demonstrate compliance with the emission rates. The permittee will note in the operating record the periods when a pre-coat filter is cleaned. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

49. The permittee will maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-02 to demonstrate compliance with the VOC emission rates. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

50. The permittee will measure and record the solids content of the lime mud fed to source SN-02 at least once per day while the kiln is in operation in order to demonstrate compliance with Specific Condition #49. The Department may use the records for enforcement purposes. The permittee must update the records no later than the fifteenth day following the last day the 30-day rolling average that the records represent, keep the records on-site, and make the records available to Department personnel upon request. [§19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

51. The permittee will demonstrate compliance with the NO_X emissions by the use of the equations below. The permittee will calculate the NO_x emissions at least once every 15 minutes. The average hourly NO_x emissions calculated using four or more data points equally spaced over an hour. The permittee will provide Department personnel with any of the information used to calculate the NO_X emissions for source SN-02 upon request. The minimum data availability will be at least 95% of this kiln's operating hours. The equation below may be changed based on actual stack emissions testing after the Department approves the test results and the new equation. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

$$C_{NOx} = -74.5742 + [24.1788 * HO] + [0.985984 * N]$$

$$ENOX = CNOX * DSCF / hr * 1.194e - 7$$

where:

C_{NOX} = NO_X concentration, 1-hr avg., ppm

E_{NOX} = NO_X emissions, 1-hr avg., lb/hr

N = total natural gas flow, 1000 standard cubic feet per hour

DSCF = stack flow rate, dry standard cubic feet per hour

1.194E-7 = conversion factor, ppm NO_X to lbs/dscf

HO = kiln hood oxygen concentration, percent

52. The carbon monoxide and the oxides of nitrogen emission limits for this source are 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average. The permittee must update the records no later than the fifteenth day following the last day the 30-day rolling

average period that the records represent, keep the records on-site, and make the records available to Department personnel upon request. [§19.501 *et seq*. of Regulation 19 and 40 CFR Part 52, Subpart E]

53. The No. 3 Lime Kiln is an affected source pursuant 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills". The specific conditions are contained in Specific Condition 54 through 65. Appendix E contains a copy of 40 CFR, Part 63, Subpart MM.

54. The permittee may comply with the PM standards for the exhaust gases discharged to the atmosphere from SN-02 by ensuring the concentration of PM in the exhaust gases discharged to the atmosphere from SN-02 is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen. [Regulation No. 19 §19.304 and 40 CFR §63.862(a)(i)(C)]

55. The permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for SN-02. [Regulation No. 19 §19.304 and 40 CFR §63.684(d)]

56. The COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(3)]

57. The permittee must reduce the COMS data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(4)]

58. The permittee must implement corrective action, as specified in the startup, shutdown and malfunction plan if the average of ten consecutive 6-minute averages result in a measurement opacity of greater than 20 percent opacity. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(1)(i)]

59. The permittee is in violation of the standards of §63.862 when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(2)(ii)]

60. The permittee must conduct an initial performance test using the test methods and procedures listed in §63.7 and 40 CFR §63.865(a) or §63.865(b), except as provided in 40 CFR §63.865(c)(1). The permittee performed the initial testing on September 12, 2004.

61. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

    a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

    b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

    c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

        i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

62. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

63. In addition to the general records required by §63.10(b)(2), the owner or operator must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

a. Records of CaO production rates in units of Mg/d or ton/d for all lime kilns;

b. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

c. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);

d. Records of monitoring parameter ranges established for each affected source or process unit;

e. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request.

64. The owner or operator of any affected source or process unit must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

65. The owner or operator must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

a. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

b. The owner or operator of an affected source or process unit subject to the requirements of this subpart and subpart S of this part may combine excess emissions and/or summary reports for the mill. The permittee must submit the reports pursuant to General Condition No. 7.

Source SN-03 - No. 1 Power Boiler

Description

The No. 1 Power Boiler, installed in 1967-68, is original to the Ashdown Mill. Due to the date of installation, the No. 1 Power Boiler is not subject to the New Source Performance Standards for Industrial Boilers (D, Da, or Db). It is also not subject to the Part 64 CAM rule as multiclones with no provision for bypass or independent control which are considered inherent process equipment and not control devices subject to Part 64 rules.

The No. 1 Power Boiler combusts bark, wood waste, tire-derived fuel (TDF), municipal yard waste palletized paper fuel (PPF), No.6 fuel oil, reprocessed fuel oil, and natural gas and has a heat input rating of 580 MMBtu/hr. Bark is delivered to a surge bin from the wood yard before being sent to a separate conveyor feeding the No. 1 Power Boiler. The bark handling system feeds wood waste, PPF, TDF, and municipal yard waste to the boiler. Natural gas supplements other fuels during high steam demand periods to maintain the 850-psig steam header.

The No. 1 Power Boiler is equipped with a traveling grate, a combustion air system, and multiclones for particulate removal. The permitted emission rate for PM/PM_{10} is 343 lb/hr, which, at design heat input, is 0.6 lb PM/MMBtu. Carbon monoxide, particulates and NO_X are tested every five years to verify compliance with permitted limits.

The multiclones used for particulate removal are rated for 85,000 DSCFM, with a theoretical maximum differential pressure of 15 in. H_2O. Prior testing showed the 40% opacity limit can be maintained with a ΔP of 0.68 inches or greater. Typical inlet velocity of the flue gas is about 40 ft/sec, and the typical outlet temperature of the flue gas to the atmosphere is about 500°F.

Particulate matter emissions from this boiler are controlled by the use of multiclones. No other control equipment or CEMs are associated with this boiler. The permittee tested this source for acetaldehyde and benzene emissions as required under Permit #287-AOP-R0. Because the emissions were below detectable levels during the testing, the permittee is not required to conduct any further testing for acetaldehyde and benzene from this source.

Specific Conditions

66. The permittee will not exceed the emission rates in the following table. Compliance with the sulfur dioxide emission rates demonstrated by the limits on the sulfur content of the fuel and on the permitted fuel oil usage at this source as specified in Specific Conditions #71 and #79. The PM_{10}/PM testing required in Specific Condition #76. The required testing of this source in Specific Condition #77 demonstrates compliance with the VOC emission limits. The required testing of this source in Specific Condition #78 demonstrates compliance with the CO and NO_X emission limits. (NOTE: The hourly rates are based on the worst-case scenario.) [Regulation No. 19 §19.501 *et seq*. and 40 CFR Part 52, Subpart E]

Table 12 – SN-03 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	343.0	1502.3
SO_2	1285.0	214.0
VOC	43.0	214.6
CO	164.0	718.3
NO_x	247.5	1084.1

67. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the PM emission rates demonstrated by testing this source every five years as required by Specific Condition #76. The permittee demonstrated compliance with the acetaldehyde and benzene emissions with testing under Permit #287-AOP-R0. The permittee demonstrated compliance with the barium emissions with stack testing. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 13 – SN-03 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	343.0	1502.3
Barium	0.77	3.38
Acetaldehyde	0.84	3.68
Benzene	0.49	2.15

68. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 when firing only natural gas.

Table 14 – SN-03 Visible Emissions Natural Gas

SN	Limit	Regulatory Citation
03	5%	§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

69. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 when firing a fuel other than natural gas. The permittee complies with this condition by monitoring the pressure drop across the multi-clones in Specific Condition #74.

Table 15 – SN-03 Visible Emissions

SN	Limit	Regulatory Citation
03	40%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

70. Weekly observations of the opacity from this source shall be conducted by personnel familiar with the facility's visible emissions. The facility shall maintain personnel trained, but not necessarily certified, in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the facility shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The facility shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated weekly, kept on site, and made available to Department personnel upon request. ['19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

    a. The date and time of the observation.

    b. If visible emissions which appeared to be above the permitted level were detected.

    c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.

    d. The name of the person conducting the opacity observations.

71. The sulfur content of the fuel oil will not exceed 3.0% by weight and total SO_2 emissions will not exceed 214 tons in any consecutive twelve-month period, as calculated monthly from total fuel usage and batch sulfur content. The calculation of the SO_2 emission is as follows: [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

$$SO_2 \text{ tons} = \frac{(\text{Fuel oil gallons/batch})(7.88 \text{ lb/gal})(\text{Weight \% S in batch}/100)(2.0\ SO_2/S)}{2000}$$

72. The permittee will either test each batch of fuel oil received for sulfur content or receive a manufacturer's certification of the sulfur content of each batch of fuel oil to demonstrate compliance with Specific Condition #71. The permittee will update these records within ten days of receipt of each batch of fuel oil, keep the records on-site, and make the records available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

73. The permittee will only use the following fuels to fire the No. 1 Power Boiler: bark, including bark and wood chips used to absorb oil spills, wood waste, municipal yard waste, recycled sanitary products composed of cellulose and polypropylene, pelletized paper fuel, No. 6 fuel oil, used oil generated on-site, natural gas, reprocessed fuel oil and tire derived fuel (TDF). Plant Wide Condition #14 establishes plant wide limits on the 24-hour usage of TDF. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

74. The pressure drop across the multi-clones will not fall below 0.68 in. of H_2O while burning fuels other than natural gas. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and §18.1003 of Regulation 18]

75. The permittee will monitor and record once per eight-hour shift the pressure drop across the multiclone to demonstrate compliance with Specific Condition #74. The permittee will note in the records when firing any fuel other than natural gas. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

76. The permittee will conduct tests of the particulate matter emission rates from source SN-03 every five years using EPA Reference Method 5 and 202 to demonstrate compliance with the particulate limits of Specific Condition #66 and 67. The permittee will perform the PM_{10} test using either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will perform the test pursuant to Plant Wide Condition No. 3. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

77. The permittee will conduct tests of the VOC emission rates from source SN-03 every five years using EPA Reference Method 25A to demonstrate compliance with the VOC limits of Specific Conditions #66. The permittee will perform the test pursuant to Plant Wide Condition No. 3. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

78. The permittee will test emissions for CO using EPA Reference Method 10B and NO_X using EPA Reference Method 7E every five years. The permittee will conduct the testing pursuant to Plant Wide Condition #3. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

79. The permittee will not use in excess of 2,700,000 gallons of fuel oil at source SN-03 per consecutive 12-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

80. The permittee will maintain records of the amount of fuel oil fired at source SN-03 to demonstrate compliance with Specific Condition #79. The permittee will maintain a monthly total and a twelve-month rolling total. The permittee must update the records no later than the fifteenth day of the month following the month that the records represent, keep the records on-site, and make the records available to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Source SN-05 - No. 2 Power Boiler

Description

The mill installed the No. 2 Power Boiler in 1975, with startup of the unit in February of 1976. Due to its design heat input rate (820 MMBtu/hr) and date of installation/construction, the boiler is subject to 40 CFR 60, Subpart D, "Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971". It is also subject to 40 CFR 52, Subpart A (PSD Regulations), and 40 CFR 60, Subpart BB, "Standards of Performance for Kraft Pulp and Paper Mills."

The No. 2 Power Boiler primarily fires pulverized bituminous coal. The boiler also burns small amounts of bark to help control NO_X emissions. The boiler also burns PPF, TDF, municipal yard waste, No. 6 Fuel Oil, used oil, natural gas and reprocessed oil. The No. 2 Power Boiler is normally base-loaded to supply steam for the 850 psig header, but can be operated as a swing boiler as well. When the boiler is under normal conditions, the boiler fires no gas. The heat input rating for the unit, regardless of fuel mix, is 820 MMBtu/hr. Currently, the No. 2 Power Boiler is the primary combustion source used for incinerating HAPs in LVHC gas streams with a required minimum temperature and retention time to assure efficient destruction.

The No. 2 Power Boiler is equipped with a traveling grate, combustion air system including over fire air, multiclones for particulate removal, and two venturi scrubbers in parallel for removal of remaining particulates and SO_2. The SO_2 loading to the boiler is significant since the boiler can burn non-condensable gases (Subpart BB) and pulverized coal. This permit modification allows new stack testing at reduced heat inputs to allow the establishment of new parameters for the pressure drop across the individual scrubbers.

The No. 2 Power Boiler is subject to the CAM Rule. The only applicable Pollutant Specific Emission Units (PSEU) are for SO_2 and particulate emissions, as this source has two scrubbers in parallel to control SO_2 and particulate emissions by absorption and chemical reaction with caustic solution and pulp mill extraction stage filtrate. Scrubber differential pressure and recirculation flow to both scrubbers are maintained within set ranges to ensure compliance. The scrubbing fluid is composed of sodium hydroxide, water and pulp mill extraction stage filtrate. The PM/PM_{10} emission limit for the No. 2 Power Boiler is 82 lb/hr. Using the design heat input, the typical PM emission rate at full load would be 0.1 lb/MMBtu, and stack testing has shown very similar values.

Continuous Emissions Monitoring Systems (CEMS) are in place for NO_x, SO_2, and CO. The boiler operates under a surrogate for showing compliance with its particulate and opacity limits.

Specific Conditions

81. The permittee will not exceed the emission rates in the following table. The required monitoring of the scrubber parameters in Specific Condition #109 demonstrates compliance with the particulate matter and the lead emission rates. The Testing required in Specific Condition #105 demonstrates compliance with the PM_{10} emission rates. CEMS demonstrate compliance with the sulfur dioxide (Specific Condition #96) carbon monoxide (Specific Condition #102), and the oxides of nitrogen (Specific Condition #96). Testing every five years, as required by Specific Condition #104, shows compliance with the volatile organic compounds emission rates. [§19.501 of Regulation 19 and 40 CFR Part 52, Subpart E]

Table 16 – SN-05 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	82.0	359.2

Pollutant	lb/hr	tpy
SO_2	983.0	4305.5
VOC	92.0	403.0
CO	266.0	1165
NO_X	574.0	2514.1
Lead	0.03	0.1

82. The permittee will not exceed the emission limits in the following table. The required monitoring of the scrubber parameters Specific Condition #109 demonstrates compliance with the particulate matter emission rate. CEMS demonstrate compliance with the sulfur dioxide (Specific Condition #96) and the oxides of nitrogen (Specific Condition #96). [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 17 – SN-05 PSD Emission Limits

Pollutant	Emission Limit
PM	0.1 lb/MMBtu
SO_2	1.2 lb/MMBtu
NO_x	0.7 lb/MMBtu

83. The permittee will not exceed the emission rates in the following table. Parametric monitoring of the scrubber parameters in Specific Condition #109 demonstrates compliance with the particulate matter. The testing required in Specific Condition #104 demonstrates compliance with the HCl emission rates. Testing demonstrated compliance with the emission rates for acetaldehyde, benzene and naphthalene. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 18 – SN-05 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	Tpy
PM	82.0	359.2
Acetaldehyde	0.21	0.92
Benzene	0.21	0.92
HCl	5.75	25.19
Naphthalene	0.50	2.19

84. Source SN-05 is subject to the provisions of 40 CFR Part 60, Subpart A, and 40 CFR Part 60, Subpart D, "Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971" due to a heat input rate in excess of 250 MMBtu/hr and an installation date of 1975. Appendix F contains a copy of Subpart D. Specific Conditions #85 through #95 outlines the requirements of Appendix F.

85. The permittee will not cause discharge into the atmosphere any gases which contain particulate matter in excess of 0.10 lb/MMBtu derived from fossil fuel or fossil fuel and wood residue. [40 CFR §60.42(a)(1) and §19.304 of Regulation 19]

86. Visible emissions may not exceed the limits specified in the following table as measured by EPA Reference Method 9, except for one six-minute period per hour of not more than 27% opacity. The opacity will be demonstrated by monitoring of the scrubber parameters in Specific Condition #109.

Table 19 – SN-05 Visible Emissions

SN	Limit	Regulatory Citation
05	20%	§19.304 and §19.503 of Regulation 19, 40 CFR Part 52, Subpart E, and 40 CFR §60.42(a)1)

87. The permittee will not discharge into the atmosphere any gases which contain sulfur dioxide in excess of 0.80 lb/MMBtu derived from liquid fossil fuel or liquid fossil fuel and wood residue. [40 CFR §60.43(a)(1) and §19.304 of Regulation 19]

88. The permittee will not cause a discharge into the atmosphere of gases which contain sulfur dioxide in excess of 1.20 lb/MMBtu derived from solid fossil fuel or solid fossil fuel and wood residue. [40 CFR §60.43(a)(1) and §19.304 of Regulation 19]

89. When different fossil fuels are burned simultaneously in combination, the applicable SO_2 standard (in ng/J) will be determined by prorating using the following formula: [40 CFR §60.43(b) and §19.304 of Regulation 19]

$$PSso2 = \frac{(y * 340) + (z * 520)}{(y + z))}$$

where:

PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired.

Y is the percentage of total heat input derived from liquid fossil fuel, and

Z is the percentage of total heat input derived from solid fossil fuel.

90. The basis for compliance is the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR §60.43(c) and §19.304 of Regulation 19]

91. The permittee will not cause a discharge into the atmosphere any gases which contain nitrogen oxides, expressed as NO_2, in excess of 0.20 lb/MMBtu derived from gaseous fossil fuel. [40 CFR §60.44(a)(1) and §19.304 of Regulation 19]

92. The permittee will not cause a discharge into the atmosphere any gases which contain nitrogen oxides, expressed as NO_2, in excess of 0.30 lb/MMBtu derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue. [40 CFR §60.44(a)(2) and §19.304 of Regulation 19]

93. The permittee will not cause a discharge into the atmosphere any gases which contain nitrogen oxides, expressed as NO_2, in excess of 0.70 lb/MMBtu derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25%, by weight, or more of coal refuse). [40 CFR §60.44(a)(3) and §19.304 of Regulation 19]

94. Except as provided under Specific Condition #95, when different fossil fuels are burned simultaneously in any combination, the applicable NO_X standard (in ng/J) is determined by prorating using the following formula: [40 CFR §60.44(b) and §19.304 of Regulation 19]

$$PS_{NOx} = \frac{[x*(86)+y*(130)+z*(300)]}{(x+y+z)}$$

where:

PS_{NOX} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

x = the percentage of total heat input derived from gaseous fossil fuel;

y = the percentage of total heat input derived from liquid fossil fuel; and

z = the percentage of total heat input derived from solid fossil fuel (except lignite).

95. When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, the standard for nitrogen oxides does not apply. [40 CFR §60.44(c) and §19.304 of Regulation 19]

96. The permittee will install, calibrate, maintain, and operate continuous monitoring systems for measuring sulfur dioxide emissions, oxides of nitrogen emissions, and either oxygen or carbon dioxide. Appendix B contains a copy of the CEMS conditions. The CEMS will give readouts which will demonstrate compliance with any of the applicable limits for the pollutant in question. [40 CFR §60.45(a), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

97. The permittee will submit an excess emission report to the Director semiannually for each six-month period in the calendar year. All semiannual reports must be postmarked by the 30th day following the end of six-month period. Each excess emission and MSP report shall include the information required in 40 CFR § 60.7(c). Periods of excess emissions and monitoring system downtime that shall be reported are defined as follows:

    a. Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a CEM exceed the applicable standard in 40 CFR § 60.43 or

    b. Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of nitrogen oxides as measured by a CEM exceed the applicable standard in 40 CFR § 60.44.

98. Source SN-05 is subject to the provisions of 40 CFR Part 60, Subpart BB, "Standards of Performance for Kraft Pulp Mills" because SN-05 incinerates non-condensable gases produced at other sources subject to Subpart BB. Appendix C contains a copy of Subpart BB. Specific Conditions #99 and #100 outlines the requirements of Subpart BB. [Regulation No. 19 §19.304 and 40 CFR §63 Subpart BB]

99. The non-condensable gases incinerated at source SN-05 will be subjected to a minimum temperature of 1200°F for at least 0.5 seconds. Previous tests indicated the permittee meets the required retention time. [40 CFR §60.283(a)(1)(iii) and §19.304 and §19.804 of Regulation 19]

100. The permittee will install, calibrate, maintain, and operate a monitoring device which measures and records the combustion temperature at the point of incineration of effluent gases emitted from any digester system, brown stock washer system, black liquor oxidation system, or condensate stripper system where the provisions of §60.283(a)(1)(iii) apply. The monitoring device is to be certified to be accurate within ± 1 percent of the temperature being measured. [40 CFR §60.284(b)(1) and §19.304 of Regulation 19]

101. The permittee will maintain records of the combustion temperature required in Specific Condition #100. The records will contain a rolling hourly average of the combustion temperature. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

102. The permittee will install, calibrate, maintain, and operate a continuous monitoring system for measuring carbon monoxide. Appendix B of this permit contains a copy of the CEMS conditions. [Regulation No. 19 §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

103. The CEMS will give readouts which demonstrate compliance with any of the applicable limits for the pollutant in question. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

104. The permittee will conduct tests of the VOC and HCl emission rates from source SN-05 every five years using EPA Reference Method 25A, and Method 26A, respectively, to demonstrate compliance with the permitted VOC, and HCl limits of Specific Conditions #81 and #83. The permittee will comply with Plant Wide Condition #3 for the testing. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

105. The permittee will perform the PM test using EPA Reference Methods 5 and 202. The permittee will perform PM_{10} test using either EPA Reference Methods 201A and 202 or 5 and 202. The Permittee will test within 180 days of the effective date of the permit and every 5 years thereafter. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

106. The permittee will fire only the following items in the #2 Power Boiler: non-condensable gases, bark, bark and wood chips used to absorb oil spills, wood waste, municipal yard waste, natural gas, coal, used oil generated on-site, recycled sanitary products based on cellulose and polypropylene, No. 6 fuel oil, reprocessed fuel oil and tire-derived fuel (TDF). Plant Wide Condition #14 establishes plant wide limits on the 24-hour usage of TDF. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

107. The permittee will maintain records of fuels used to fire source SN-05, times fuel used, and applicable SO_2 and NO_X limits to demonstrate compliance with the fuel-specific NSPS and PSD limits. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. The permittee will submit each individual month total and a 12-month rolling total of the fuel usage as required by General Condition #7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

108. The carbon monoxide emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average. [§19.501 *et seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

109. In lieu of the continuous opacity monitor required by 40 CFR §60.45 and 40 CFR §60.284(a)(1), the permittee will comply with the following EPA approved monitoring plan. The Department determined and the permittee agreed that compliance with the following requirements will also demonstrate compliance with the particulate matter and the lead emission rates.

    a. maintain a minimum flow rate of scrubbing liquid flow rate of 1,500 gallons per minute;

    b. maintain the pressure drop of the gas stream across the scrubber at or above 10 in. H_2O, and

    c. continuously monitor and record the scrubbing liquid flow rate and the pressure drop of the gas stream across the scrubber.

110. The permittee will maintain records of the scrubbing liquid flow rate and the pressure drop of the gas stream across the scrubber for a period of at least two years following the date of the records. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

111. The permittee will submit reports of excess emissions to the Department on a semi-annual basis. All reports will be postmarked by the 30th day of the month following the end of each calendar half. The permittee will submit the excess-monitoring reports pursuant to General Condition No. 7. Excess emissions are defined as follows: [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

    a. Any period when the 1-hour average scrubbing liquid flow rate is less than 1,500 gallons per minute, and

    b. Any period when the 1-hour average pressure drop of the gas stream across the scrubber is less than 10 inches H_2O.

    c. The permittee may test the parameters of sections "a" and "b" of this specific condition and operate one or both scrubbers to demonstrate that required emission rates can be met with modified parameters at lower heat inputs to the boiler. The permittee will submit a protocol describing the tests and the time required to establish the new parameters before conducting the tests. Upon acceptance of the new operational parameters for the individual scrubbers, the permittee may submit a permit modification to substitute the new parameters for those specified in sections "a" and "b" of this specific condition. [§19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR §60.13(i), and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and §18.1004 of Regulation 18]

Source SN-06 - No. 2 Recovery Boiler

Description

The No. 2 Recovery Boiler, last modified in 1989, has a heat input capacity of 1,160 MMBtu/hr. No. 2 Recovery Boiler combusts black liquor solids to recover inorganic chemicals. Fuel oil, on-site generated used fuel oil, reprocessed fuel oil and natural gas are also combusted in this boiler.

An electrostatic precipitator controls emissions. Continuous emission monitoring systems are in place for opacity, total reduced sulfur, sulfur dioxide, carbon monoxide, and oxides of nitrogen.

This source is subject to the provisions of 40 CFR Part 60, Subpart BB "Standards of Performance for Kraft Pulp Mills", 40 CFR Part 63, Subpart MM, "National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills" and 40 CFR Part 63, Subpart MM, "National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills." The No. 2 Recovery Boiler underwent a PSD review in Permit 287-AR-3.

Specific Conditions

112. The permittee will not exceed the emission rates in the following table. Proper operation of the ESP and the testing required by Specific Condition #134 demonstrate compliance with the PM_{10} emission limit. Testing every five years as required in Specific Condition #133 demonstrates compliance with the volatile organic compound emission rates. CEMs, Specific Condition #127, monitor compliance with the carbon monoxide emission rates. [§19.501 *et seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

Table 20 – SN-06 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	84.4	369.7
VOC	46.7	204.6
CO	980.0	4292.4

113. The permittee will not exceed the emission limits in the following table. Proper operation of the ESP and the testing required by Specific Condition #134 demonstrate compliance with the particulate matter emission limit. CEMs monitor compliance with the sulfur dioxide, Specific Condition #128 and the oxides of nitrogen emission rates, Specific Condition #129. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 21 – SN-06 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	84.4	369.7
SO_2	286.0	1252.7
NO_X	309.2	1354.3

114. The permittee will not exceed the emission rates in the following table. Specific Condition #130 demonstrates compliance with the hydrogen chloride emission rates. Compliance with the sulfuric acid emission rates is determined by compliance with Specific Condition #132. Proper operation of the ESP and the testing required by Specific Condition #134 demonstrate compliance with the particulate matter emission limit. Testing demonstrated compliance with the formaldehyde, the methanol, and the styrene emission rates. [§18.801 of Regulation 18, §19.501 et seq. and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 22 –SN-06 Maximum Non-Criteria Emission Rates

Pollutant	Lb/hr	tpy
PM	84.4	369.7
Formaldehyde	0.72	3.16
Hydrogen Chloride	51.20	224.30
Methanol	1.18	5.17
Styrene	3.22	0.27
Sulfuric Acid	0.06	14.10
TRS	7.4	32.4

115. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. The COM demonstrates compliance with the opacity limits.

Table 23 – SN-06 Visible Emissions

SN	Limit	Regulatory Citation
06	20%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

116. Source SN-06 is subject to the provisions of 40 CFR Part 60, Subpart A, "General Provisions" and 40 CFR Part 60, Subpart BB, "Standards of Performance for Kraft Pulp Mills" due to an installation date in 1989. Appendix C contains a copy of Subpart BB. Specific Conditions #117 through #126 contain the requirements of this subpart. [Regulation No. 19 §19.304 and 40 CFR §60, Subpart BB]

117. The permittee will not cause a discharge into the atmosphere of any gases which contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf), corrected to 8 percent oxygen. [40 CFR §60.282(a)(1)(i) and §19.304 of Regulation 19]

118. The permittee will not cause a discharge into the atmosphere any gases which exhibit 35% opacity or greater. (Note: Specific Condition #115 requires opacity of 20%) [40 CFR §60.282(a)(1)(ii) and §19.304 of Regulation 19]

119. The permittee will not cause discharge into the atmosphere any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen. [40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19]

120. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged into the atmosphere from source SN-06. These systems will be located downstream of the control device and the span of these continuous monitoring system will be set as stated below. The permittee demonstrated that the monitors meet the required spans and will be required to notify the Department before modifying either monitoring system. Appendix B of this permit contains a copy of the CEMS conditions. [40 CFR §60.284(a)(2) and §19.304 of Regulation 19]

    a. At a TRS concentration of 30 ppm for the TRS continuous monitoring system; and

    b. At 25 percent oxygen for the continuous oxygen monitoring system.

121. The permittee will calculate and record on a daily basis the 12-hour average TRS concentrations for the two consecutive periods of each operating day. The permittee will determine each 12-hour average as the arithmetic mean of the appropriate 12 continuous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. [40 CFR §60.284(c)(1) and §19.304 of Regulation 19]

122. The permittee will calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-06. These 12-hour averages will correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and will use the arithmetic mean of the appropriate 12 continuous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. Appendix B of this permit contains a copy of the CEMS conditions. [40 CFR §60.284(c)(2) and §19.304 of Regulation 19]

123. The permittee will correct the 12-hour average TRS concentration from source SN-06 to 8% oxygen using the following equation: [40 CFR §60.284(c)(3) and §19.304 of Regulation 19]

$$C_{corr} = C_{meas} * \left[\frac{(21 - X)}{(21 - Y)} \right]$$

    where:

    C_{corr} = the concentration corrected for oxygen

    C_{meas} = the concentration uncorrected for oxygen

    X = the volumetric oxygen concentration in percentage to be corrected to 8 percent

    Y = the measured 12-hour average volumetric oxygen concentration

124. For the purpose or reports required under §60.7(c), the permittee will report semiannually periods of excess emissions as follows: [40 CFR §60.284(d)(1) and §19.304 of Regulation 19]

    a. All 12 -hour averages or TRS concentrations above 5 ppm by volume; and

    b. All 6-minute average opacities exceeding 35 percent.

125. The permittee will be required to report as excess emissions all 6-minute average opacities that exceed 20% (the opacity limit allowed under Regulation 19). However, only those emissions which exceed 35% opacity would be considered possible violations of 40 CFR Part 60, Subpart BB.

126. The Director will not consider periods of excess emissions reported under §60.284(d) to be indicative of a violation of §60.11(d) provided that: [40 CFR §60.284(e) and §19.304 of Regulation 19]

    a. The percent of the total number of possible continuous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions do not exceed:

        i. One percent for TRS emissions from recovery furnaces

        ii. Six percent average opacities from recovery furnaces

    b. The Director determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

127. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the carbon monoxide emissions in pounds per hour from source SN-06. Appendix B of this permit contains a copy of the CEMS conditions. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

128. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the sulfur dioxide emissions in pounds per hour from source SN-06. Appendix B of this permit contains a copy of the CEMS conditions. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

129. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the oxide of nitrogen emissions in pounds per hour from source SN-06. Appendix B of this permit contains a copy of the CEMS conditions. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

130. The permittee will demonstrate compliance with the hydrogen chloride emission rates by the use of the CEMS for sulfur dioxide and the following equations: [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

$$PPM\,HCl = \frac{(1.28 * PPM_{SO_2})}{(1 + (PPM_{SO_2} * 0.017))}$$

$$HC_{lbs/hr}l = HCl_{PPm} * 0.0947E-7 * DSCFH$$

131. The permittee will calculate the hourly HCl emissions using the one-hour average PPM SO_2 values obtained from the CEMS. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

132. A sulfur dioxide emission rate in excess of 250 ppm based on a three-hour average as read by the CEMS for this pollutant is a violation of the sulfuric acid emission rate. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

133. The permittee will conduct testing of the volatile organic compound emissions from source SN-06 every five years using EPA Reference Method 25A. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

134. The permittee will perform the PM test using EPA Reference Methods 5 and 202. The permittee will perform PM_{10} test using either EPA Reference Methods 201A and 202 or 5 and 202. The Permittee will test within 180 days of the effective date of the permit and every 5 years thereafter. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

135. The permittee will maintain a minimum floor tube temperature of 400°F on a three-hour average at source SN-06. This limit applies only when the boiler is firing in excess of 1.5 millions pounds per day of black liquor solids. [§19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

136. The permittee will install, calibrate, maintain, and operate a continuous monitoring device to measure and record the floor tube temperature at source SN-06. The temperature recorder will record the temperature at least once every fifteen minutes and store each hour's average in a database. The permittee will submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition #135 and the monthly average. [§19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

137. The permittee will maintain records of the pounds per day black of liquor solids fired at source SN-06 when not complying with the minimum floor tube temperature in Specific Condition #135. The permittee will update the records whenever the minimum temperature is below 400°F, keep the records on-site, and make the records available to Department personnel upon request. [§19.703 and §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

138. The carbon monoxide emission limits for this source are 30-day rolling averages while the oxides of nitrogen emission limits for this source are a 3-hour average. Days when the unit is not operating are not included in the 30-day rolling average. [§19.501 *et seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

139. The No. 2 Recovery Boiler is subject to 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills", Specific Conditions #140 through 151 contain the conditions. Appendix E contains a copy of 40 CFR Part 63, Subpart MM. [Regulation No. 19 §19.304 and 40 CFR Subpart MM]

140. The permittee must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen. [Regulation No. 19 §19.304 and 40 CFR §63.862(a)(i)(A)]

141. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from source SN-06. The span of this system will be set at 70 percent opacity. Appendix B of this permit contains a copy of the CEMS conditions. [Regulation No. 19 §19.304 and 40 CFR §63.864]

142. The COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(3)]

143. The COMS data must be reduced to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(4)]

144. The permittee must implement corrective action, as specified in the startup, shutdown and malfunction plan if the average of ten consecutive 6-minute averages result in a measurement opacity of greater than 20 percent opacity. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(1)(i)]

145. The permittee is in violation of the standards of §63.862 when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(2)(ii)]

146. The permittee must conduct an initial performance test using the test methods and procedures listed in §63.7 and 40 CFR §63.865(a) or §63.865(b), except as provided in 40 CFR §63.865(c)(1). The permittee completed the initial performance test on September 7, 2004. [Regulation No. 19 §19.304 and 40 CFR 865]

147. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

    a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

    b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

    c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

        i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

        ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

148. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

149. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

    a. Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces;

b. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

c. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);

d. Records of monitoring parameter ranges established for each affected source or process unit and

e. Records certifying that an NDCE recovery furnace equipped with a dry ESP was used to comply with the gaseous organic HAP standard in 40 CFR §63.862(c)(1).

150. The permittee must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

151. The permittee must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

a. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

b. The permittee may combine excess emissions and/or summary reports for the mill. The permittee must submit the reports pursuant to General Condition No. 7.

Source SN-08 - No. 2 Smelt Dissolving Tank

Description

The No. 2 Smelt Dissolving Tank, last modified in 1989, processes the molten sodium smelt from the No. 2 Recovery Boiler. A scrubber controls emissions of particulate matter and total reduced sulfur. The pressure drop and the scrubbing medium flow rate are continuously monitored at this source.

This source is subject to the provisions of 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills due to its date of installation. The source is subject to 40 CFR Part 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills.

The permittee tested source SN-08 for formaldehyde as required under Permit #287-AOP-R0. The formaldehyde emissions were below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde at source SN-08 at this time.

Specific Conditions

152. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with these emission rates by the scrubber parameters in Specific Condition #171 and required testing in Specific Condition #166. [§19.501 e*t seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

Table 24 – SN-08 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	18.0	78.8
VOC	9.3	40.7

153. The permittee will not exceed the emission in the following table. The permittee will demonstrate compliance with the PM and SO_2 emission rates by the scrubber parameters in Specific Condition #171. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 25 – SN-08 Maximum Criteria Emission Rates

Pollutant	lb/hr	Tpy
PM	18.0	78.8
SO_2	10.6	46.4

154. The permittee will not exceed the emission limits in the following table. The permittee demonstrates compliance for the TRS by the scrubber parameters Specific Condition #171 and testing in Specific Condition #164. [Regulation No. 19 §19.801 and 40 CFR Part 52, Subpart E]

Table 26 – SN-08 TRS Emission Limits

Pollutant	Emission Limit
TRS	0.0168 g/kg BLS

155. The permittee will not exceed the emission rates in the following table. The permittee will demonstrate compliance with the ammonia emission rates by testing required in Specific Condition #165. The permittee shows compliance with the methanol emission rates by compliance with the scrubber parameters in Specific Condition #171. The permittee demonstrated compliance with the formaldehyde emission rates by testing in December 1999. [§18.801 of Regulation 18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, §19.501 et seq., §19.804, and §19.901 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Table 27 – SN-08 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	Tpy
PM	18.0	78.8
Ammonia	40.00	175.20
Formaldehyde	0.36	1.56
Methanol	5.40	23.66
TRS	2.10	9.20

156. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Monitoring of the scrubber parameters in Specific Condition #1 demonstrates compliance with the opacity limit.

Table 28 – SN-08 Visible Emissions

SN	Limit	Regulatory Citation
08	20%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

157. Source SN-08 is subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to an installation date of 1989. Appendix C contains a copy of Subpart BB. Specific Conditions #158 through #161 outline the requirements of Subpart BB. [Regulation No. 19 §19.304 and 40 CFR §63, Subpart BB]

158. The permittee may not cause a discharge into the atmosphere from any smelt dissolving tank any gases which contain particulate matter in excess of 0.1 g/kg black liquor solids (dry weight) [0.2 lb/ton black liquor solids (dry weight)]. Compliance with the required scrubber monitoring parameters in Specific Conditions #160 and #161 demonstrates compliance with this limit. [40 CFR §60.282(a)(2) and §19.304 of Regulation 19]

159. TRS emissions from source SN-08 will not exceed 0.0168 g/kg measured as grams H_2S kg black liquor solids on a 12-hour average (0.033 lb/ton black liquor solids as H_2S). The permittee will demonstrate compliance with this limit by the required scrubber monitoring Specific Conditions #160 and #161 and the required testing in Specific Condition #164 at this source. [40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19]

160. The permittee will install, calibrate, maintain, and operate a monitoring device at source SN-08 for the continuous measurement of the pressure loss of the gas stream by the control equipment. The manufacturer must certify the monitoring device to be accurate to within a gage pressure of ± 500 Pascal's (ca. ± 2 inches water gage pressure). [40 CFR §60.284(b)(2)(i), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

161. The permittee will install, calibrate, maintain, and operate a monitoring device at source SN-08 for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The manufacturer must certify the monitoring device to be accurate within ±15% of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Administrator and the Director may be consulted for approval of alternate locations. [Pursuant to 40 CFR §60.284(b)(2)(ii), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

162. The permittee must record once per shift the measurements obtained from the continuous monitoring devices installed under 40 CFR §60284(b)(2) (Specific Conditions #160 and #161. [Regulation No. 19 §19.304 and 40 CFR §60.284(b)(4)]

163. The permittee will maintain records for the monitoring required in Specific Conditions #160 and #161. The Department may use the records for enforcement purposes. The permittee must update the records no later than the tenth day of the month following the month which the records represent, keep the records on-site, and make the records available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

164. The permittee will conduct testing every five years for TRS from source SN-08 using EPA Reference Method 16. The permittee must conduct the TRS test in accordance with Plant Wide Condition No. 3. [Regulation No. 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

165. The permittee will conduct tests of the ammonia emissions from source SN-08 every five years using Method 206. All tests will take place in accordance with Plant Wide Condition No. 3. [§18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

166. The permittee will perform a PM test using EPA Reference Methods 5 and 202 for SN-08. The permittee will perform PM_{10} test using either EPA Reference Methods 201A and 202 or 5 and 202. The Permittee will test within 180 days of the effective date of the permit and every 5 years thereafter. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

167. The permittee will test source SN-08 for VOC emissions using EPA Reference Method 25A every five years. The permittee will also be required to monitor the scrubber flow rate during the testing in order to demonstrate that the VOC emissions will be below the permitted levels when the flow rate is at or near

the minimum required by Specific Condition #171. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

168. The No. 2 Smelt Tank Vent is subject to 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants For Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills," Appendix E contains a copy of Subpart MM. [§19.304 of Regulation 19 and 40 CFR §63.862(a)(1)(B)]

169. The maximum concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired. [Regulation No. 19 §19.304 and 40 CFR §63.862(a)(i)(B)]

170. The permittee must install, calibrate, maintain, and operate a Continuous Parameter Monitoring System (CPMS) to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in §63.8(c), as well as the procedures in paragraphs (e)(10)(i) and (ii) of 40 CFR §63.864. [Regulation No. 19 §19.304 and 40 CFR 40 CFR §63.864(e)]

a. The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of ±500 Pascals (±2 inches of water gage pressure); and

b. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate.

171. During the initial performance test required in §63.865, the permittee established operating ranges for the monitoring parameters in paragraphs 40 CFR §63.864(e)(10). The permittee must maintain the scrubber parameters in Table 29. The permittee demonstrates compliance by compliance with Specific Condition #178 [Regulation No. 19 §19.304 and 40 CFR §63.864(j)]

Table 29 – SN-08 Scrubber Parameters

SN-08 No.2 Smelt Dissolving Tank Scrubber Parameters	Scrubber Flow	Minimum 45 gpm
	Scrubber Pressure Drop (ΔP)	Minimum 9 in. H_2O

172. The permittee may establish expanded or replacement operating ranges for the monitoring parameter values listed in 40 CFR §63.864 (e)(10) and established in paragraph 40 CFR §63.864(j)(1) or (2) during subsequent performance tests using the test methods in §63.865. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(3)]

173. The permittee unit must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. The permittee may conduct multiple performance tests to establish a range of parameter values. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(4)]

174. The permittee must implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under §63.866(a) if any 3-hour average parameter value is outside the range of values established in Specific Conditions #171. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)]

175. The permittee is in violation of the standards of §63.862 when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in 40 CFR §63.864 (j).

176. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

    a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

    b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

    c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

        i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

        ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

177. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). The permittee must submit records of corrective action to the Department pursuant to General Condition No. 7. [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

178. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

    a. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

    b. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d); and

    c. Records of monitoring parameter ranges established for each affected source or process unit.

    d. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request.

179. The permittee must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

180. The permittee must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

    a. When no exceedances of parameters have occurred, the permittee must submit a semiannual report stating that no excess emissions occurred during the reporting period.

    b. The permittee may combine the subpart MM and subpart S excess emissions and/or summary reports for the mill. The permittee must submit the reports pursuant to General Condition No. 7.

Source SN-09 - No. 2 Lime Kiln

Description

The primary fuels for the No. 2 Lime Kiln, last modified in 1979, are natural gas and #6 fuel oil. The No. 2 Lime Kiln may also incinerate non-condensable gases. CEMS are in place at this source to monitor the carbon monoxide and the TRS emissions. Stack test data showed that nearly all of the SO_2 from the combustion of fuel oil reacts with CaO in the kiln. A venturi scrubber is an additional control of SO_2 emissions from this source. Based on stack tests, the combination of these two processes for removing SO_2 from fuel oil combustion at the maximum rate has a combined efficiency of over 99%.

During shutdown periods, the two lime silos for SN-02 and SN-09 will be connected to the slaker scrubbers instead of the lime kilns while the kilns are being inspected and repaired.

Due to its date of installation, this source is subject to 40 CFR Part 60, Subpart BB "Standards of Performance for Kraft Pulp Mills". The source is also subject to 40 CFR Part 63, Subpart MM—National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills. Since the source is subject to a MACT, the CAM rule does not apply.

Specific Conditions

181. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the particulate matter emission rates by the required monitoring of the scrubber parameters in Specific Condition #212. CEMS measure the compliance with the carbon monoxide and the total reduced sulfur emission rates. The limit on the minimum solids content of the lime mud in Specific Condition #206 demonstrates compliance with the volatile organic compound emission rates. The permittee demonstrates compliance with the SO_2 emissions by complying with Specific Conditions #201 and #203. The permittee will show compliance with the NO_X limit by the testing required in Specific Condition #207. [§19.501 *et seq.*. of Regulation 19 and 40 CFR Part 52, Subpart E]

Table 30 – SN-09 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	17.1	74.9
PM_{10}	51.0	223.4
SO_2	16.7	73.2
CO	55.0	240.9
NO_X	68.6	300.5

182. The permittee will meet the emission limits in the following table. The permittee demonstrates compliance by the TRS CEMS in Specific Condition #190 [Regulation No. 19 §19.804 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 31 – SN-09 TRS Emission Rates

Pollutant	TRS Concentration
TRS	8 ppmv**
**Corrected to 10% by volume O_2	

183. The permittee will not exceed the emission rates in the following table. Monitoring of the scrubber parameters in Specific Condition #212 ensures compliance with the particulate matter emission rates. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 32 – SN-09 PSD Emission Rates

Pollutant	**lb/hr**	**tpy**
PM	51.0	223.4

184. The permittee will not exceed the emission rates in the following table. The permittee demonstrated compliance with these emission rates by testing for these pollutants. [§18.801 of Regulation 18, §19.501 *et seq.* and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 33 – SN-09 Maximum Non-Criteria Emission Rates

Pollutant	**lb/hr**	**tpy**
Benzene	0.23	1.01
Methanol	1.18	5.17
Formaldehyde	0.02	0.09
Toluene	0.02	0.09
TRS	8.00	35.0

185. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Monitoring of the scrubber parameters in Specific Condition #212 demonstrates compliance with the opacity limit.

Table 34 – SN-09 Visible Emissions

SN	**Limit**	**Regulatory Citation**
09	20%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

186. Source SN-09 is subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions and 40 CFR Part 60, Subpart BB "Standards of Performance for Kraft Pulp Mills" due to commencement of construction after September 24, 1976. Appendix C contains a copy of Subpart BB. Specific Conditions #187 through #199 have the requirements of this subpart.

187. Particulate matter emissions will not exceed 0.064 gr/dscf corrected to 10 percent oxygen when burning gaseous fossil fuel. The required monitoring of the scrubber Specific Conditions #191 and #192 demonstrates compliance with the particulate limit. [40 CFR §60.282(a)(3)(i) and §19.304 of Regulation 19]

188. Particulate matter emissions will not exceed 0.13 gr/dscf corrected to 10 percent oxygen when burning liquid fossil fuel. The required monitoring of the scrubber in Specific Condition #191 and #192 demonstrates compliance with the particulate limit. [40 CFR §60.282(a)(3)(ii) and §19.304 of Regulation 19]

189. Total reduced sulfur emissions from source SN-09 will not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen. [40 CFR §60.283(a)(5) and §19.304 and §19.804 of Regulation 19]

190. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of the TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged to the atmosphere from source SN-09. These systems will be located downstream of the control device and the spans of these continuous monitoring systems will be set: [40 CFR §60.284(a)(2), §19.304, §19.703 and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

    a. At a TRS concentration of 30 ppm for the TRS continuous monitoring system

    b. At 25 percent oxygen for the continuous oxygen monitoring system.

191. The permittee will install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the pressure loss of the gas stream by the control equipment. The manufacturer must certify the monitoring device to be accurate within a gage pressure of +500 Pascal's (ca. +2 inches water gage pressure). [40 CFR §60.284(b)(2)(i), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

192. The permittee will install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified to be accurate within ± 15 percent of design liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The permittee may consult the Administrator and the Director for approval of alternative locations. [40 CFR §60.284(b)(2)(ii), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

193. The permittee will calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of the operating day. The permittee will determine each 12-hour average as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(1), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E]

194. The permittee will calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-09. The 12-hour averages will correspond to the 12-hour average TRS concentrations under §60.284(c)(1) and determined as an arithmetic mean of the appropriate 12 continuous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(2), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E]

195. The permittee will correct all 12-hour average TRS concentrations to 10 volume percent oxygen using the following equation: [40 CFR §60.284(c)(3) and §19.304 of Regulation 19]

$$C_{corr} = C_{meas} * \left(\frac{(21 - X)}{(21 - Y)} \right)$$

where:

C_{corr} = the concentration corrected for oxygen

C_{meas} = the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 10 percent

Y = the measured 12-hour average volumetric oxygen concentration

196. The permittee will record once per eight-hour shift measurements obtained from the CEMS installed for liquid supply pressure and gas pressure drop. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available for Department personnel on request. [40 CFR §60.284(c)(4), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E]

197. The permittee will report semiannually periods of excess emissions from source SN-09. Periods of excess emissions are 12-hour average TRS concentrations above 8 ppm by volume. [40 CFR §60.284(d)(2) and §19.304 of Regulation 19, for the purposes of reports required under §60.7(c)]

198. The Administrator or the Director will not consider periods of excess emissions reported under 40 CFR §60.284(d)(2) to be indicative of a violation of §60.11(d) provided that the Administrator determines that permittee operated and maintained the unit, including air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. [40 CFR §60.284(e) and §19.304 of Regulation 19]

199. The permittee will install, calibrate, maintain, and operate a CEMS for measuring CO emissions which gives a readout in pounds per hour. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

200. The lime kiln may use only pipeline quality natural gas, reprocessed fuel oil, on-site generated used fuel oil, and #6 fuel oil as fuels. The lime kiln may also incinerate non-condensable gases as allowed by 40 CFR Part 60, Subpart BB. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

201. The monthly average sulfur content of the fuel oil will not exceed 3.0% by weight. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

202. The permittee will either test each shipment of fuel oil or obtain manufacturer's certification of the sulfur content in order to demonstrate compliance with Specific Condition #201. The Department may use the records for enforcement purposes. The permittee must keep the records on-site and make the records available to Department personnel upon request. The permittee will submit the records to the Department pursuant to General Condition No. 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

203. The permittee will not use in excess of 5,400,000 gallons of fuel oil per consecutive 12-month period at the No. 2 Lime Kiln (SN-09). [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

204. The permittee will maintain records of the amount of fuel oil fired at the No. 2 Lime Kiln in order to demonstrate compliance with Specific Condition #203. The Department may use the records for enforcement purposes. The permittee must keep the records on-site and make the records available to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department pursuant to General Condition No. 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

205. The permittee will maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-09 to demonstrate compliance with the VOC emission rates. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

206. The permittee will measure and record the solids content of the lime mud fed to source SN-09 at least once per day while the kiln is in operation in order to demonstrate compliance with Specific Condition #205. The Department may use the records for enforcement purposes. The permittee must keep the records on-site and make the records available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311] §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

207. The permittee will test the NO_X emissions using method 7E. The permittee will test within 180 days of the effective date of the permit and then annually. The permittee will conduct the test in compliance with Plant Condition No. 3. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

208. The carbon monoxide emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

209. The No. 2 Lime Kiln is also subject to 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants For Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills." Appendix E contains a copy of Subpart MM. The applicable requirements of Subpart MM follow in Specific Conditions #210- #222.

210. The permittee may comply with the PM standards in §63.862 for the exhaust gases discharged to the atmosphere from SN-09 by ensuring the concentration of PM in the exhaust gases discharged to the atmosphere from SN-09 is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen. [Regulation No. 19 §19.304 and 40 CFR §862(a)(i)(C)]

211. The permittee must install, calibrate, maintain, and operate a Continuous Parameter Monitoring System (CPMS) to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in §63.8(c), as well as the procedures in paragraphs (e)(10)(i) and (ii) of 40 CFR §63.864. [Regulation No. 19 §19.304 and 40 CFR 40 CFR §63.864(e)]

    a. The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of ±500 Pascals (±2 inches of water gage pressure); and

b. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate.

212. During the initial performance test, completed in September 2004, required in §63.865, the permittee established operating ranges for the monitoring parameters in paragraphs 40 CFR §63.864(e)(10). The permittee established the following parameters for the scrubber at SN-09: [Regulation No. 19 §19.304 and 40 CFR §63.864(j)]

Table 35 – SN-09 Scrubber Parameters

SN-09 No.2 Lime Kiln	Scrubber Liquor Flow	Minimum 1500 gal/min
	Scrubber Pressure Drop (ΔP)	Minimum 10 in. H_2O

213. The permittee may establish expanded or replacement operating ranges for the monitoring parameter values listed in 40 CFR §63.864 (e)(10) and established in paragraph 40 CFR §63.864(j)(1) or (2) during subsequent performance tests using the test methods in §63.865. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(3)]

214. The permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. The permittee may conduct multiple performance tests to establish a range of parameter values. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(4)]

215. The permittee must implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under §63.866(a) if any 3-hour average parameter value is outside the range of values established in Specific Conditions #213. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)]

216. The permittee is in violation of the standards of §63.862 when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in 40 CFR §63.864 (j).

217. The permittee must conduct an initial performance test using the test methods and procedures listed in §63.7 and 40 CFR §63.865(a) or §63.865(b), except as provided in 40 CFR §63.865(c)(1), using the following methods: [Regulation No. 19 §19.304 and 40 CFR 865]

218. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

219. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

220. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

a. Records of CaO production rates in units of Mg/d or ton/d for all lime kilns;

b. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

c. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);

d. Records of monitoring parameter ranges established for each affected source or process unit;

221. The permittee must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

222. The permittee must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

a. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

b. The permittee may combine the excess emissions and/or summary reports for subpart S with the reports required by subpart MM. The permittee must submit the reports pursuant to General Condition No. 7.

Source SN-11 - No. 2 Natural Gas-Fired Package Boiler

Description

Source SN-11 is the No. 2 natural gas-fired Package Boiler, with a heat input capacity of 210 MMBtu/hr. This source is not subject to an NSPS subpart based on the date of installation. The No. 2 Natural Gas-Fired Package Boiler was subject to a PSD review in Permit No. 287-AR-3. BACT was natural gas as fuel for SO_2 and PM and low excess air (8-12%) for NO_X.

Specific Conditions

223. The permittee will not exceed the emission rates in the following table at source SN-11. The use of pipeline quality natural gas as required in Specific Condition # 226 to fire this source demonstrates compliance with the emission rates. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 36 – SN-11 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	0.6	2.6
SO_2	0.2	0.9
VOC	0.3	1.3
CO	25.4	111.3
NO_X	27.4	120.0

224. The permittee will not exceed the emission rates in the following table at source SN-11. The use of pipeline quality natural gas as required in Specific Condition # 226 to fire this source demonstrates compliance with the emission rates. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 37 – SN-11 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	0.6	2.6

225. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with Specific Condition #226 demonstrates compliance with the opacity limit.

Table 38 – SN-11 Visible Emissions

SN	Limit	Regulatory Citation
11	5%	§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

226. No. 2 Package Boiler may use only pipeline quality natural gas. [§19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, 40 CFR Part 52, Subpart E, and §18.1004 of Regulation 18]

Source SN-12 - No. 3 Package Boiler

Description

Source SN-12, installed in 1987, is a natural gas fired package boiler with a heat input capacity of 163 MMBtu/hr. 40 CFR Part 60, Subpart Db applies to Source SN-12 due to its size and its date of installation. The boiler has no control equipment.

Specific Conditions

227. The permittee will not exceed the emission rates in the following table. The use of pipeline quality natural gas as required in Specific Condition # 230 to fire this source demonstrates compliance with the emission rates. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 39 – SN-12 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	0.5	2.2
SO_2	0.1	0.4
VOC	0.3	1.0
CO	6.4	28.0
NO_X	16.0	70.1

228. The permittee will not exceed the emission rates in the following table. The use of pipeline quality natural gas as required in Specific Condition # 230 to fire this source demonstrates compliance with the emission rates. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 40 – SN-12 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	0.5	2.2

229. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. The use of pipeline quality natural gas as required in Specific Condition # 230 to fire this source demonstrates compliance with the emission rates

Table 41 – SN-12 Visible Emissions

SN	Limit	Regulatory Citation
12	5%	§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

230. No. 3 Package Boiler may use only pipeline quality natural gas as fuel. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and §18.1004 of Regulation 18]

231. Source SN-12 is subject to the provisions of 40 CFR Part 60, Subpart 60 - General Provisions and 40 CFR Part 60, Subpart Db, "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" due to a heat input capacity of over 100 MMBtu/hr and an installation date of 1987. Appendix A contains a copy of subpart. Specific Conditions #232 through #240 contain the requirements of this subpart. [Regulation No. 19 §19.304 and 40 CFR §60, Subpart BB]

232. The permittee will not cause a discharge into the atmosphere any gases that contain nitrogen oxides (expressed as NO_2) in excess of 0.10 lb/MMBtu at a low heat release rate. [40 CFR §60.44b(a) and §19.304 of Regulation 19]

233. Compliance with the NO_x emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average for any subsequent performance tests for any facilities that combust natural gas. [40 CFR §60.44b(j)(1) and §19.304 of Regulation 19]

234. The nitrogen oxides standards under §60.44b apply at all times. [40 CFR §60.46b(a) and §19.304 of Regulation 19]

235. The permittee will monitor steam generating unit operating conditions and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to §60.49b(c). [40 CFR §60.48b(g)(2) and §19.304 of Regulation 19]

236. The owner or operator of each affected facility subject to the nitrogen oxides standard of §60.44b who seeks to demonstrate compliance with those standards by the monitoring of steam generating unit operating conditions under the provisions of §60.48b(g)(2) will submit to the Administrator and the Director for approval a plan that identifies the operating conditions monitored under §60.48b(g)(2) and the records maintained under §60.49b(j). This plan will be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. The plan will:

    a. Identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates. Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion and the level of excess air;

    b. Include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rate and these operating conditions;

    c. Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(j).

237. If the plan is approved, the owner or operator will maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including the steam generating unit load, identified in the plan. [40 CFR §60.49b(c) and §19.304 of Regulation 19]

238. The permittee will record and maintain records of each fuel combusted during each day and calculate the annual capacity factor for natural gas for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR §60.49b(d) and §19.304 of Regulation 19]

239. The permittee will maintain records of the following information for each steam generating unit operating day: [40 CFR §60.49b (p) and §19.304 of Regulation 19]

    a. Calendar date;

    b. The number of hours of operation; and

    c. A record of the hourly steam load.

240. The permittee will submit to the Administrator on a quarterly basis: [40 CFR §60.49b (q) and §19.304 of Regulation 19]

    a. The annual capacity factor over the previous 12 months and

    b. If the affected facility meets the criteria described in §60.44b(j), the results of any nitrogen oxides emission tests required during the quarter, the hours of operation during the quarter, and the hours of operation since the last nitrogen oxides emission test.

Source SN-14 - No. 3 Recovery Boiler

Description

The No. 3 Recovery Boiler, last modified in 1989, has a heat input capacity of 1,088 MMBtu/hr. Black liquor solids are combusted in this boiler to recover inorganic chemicals. Fuel oil and natural gas are also combusted in this boiler.

An electrostatic precipitator controls emissions. Continuous emission monitoring systems are in place for opacity, sulfur dioxide, total reduced sulfur, carbon monoxide, and oxides of nitrogen.

Due to its date of installation, this source is subject to 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills. The source is also subject to 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills."

The permittee tested source SN-14 for formaldehyde emissions as required under Permit #287-AOP-R0. The formaldehyde emissions were determined to be below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde from source SN-14 at this time.

Specific Conditions

241. The permittee will not exceed the emission rates in the following table. Testing for VOC, Specific Condition #260, demonstrates compliance with the volatile organic compound emission rates. CEMS for carbon monoxide demonstrate compliance with the carbon monoxide emission rate. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 42 – SN-14 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	136.0	600.1
CO	856.0	3749.3

242. The permittee will not exceed the emission limits in the following table. The permittee demonstrates compliance for the SO_2 and NO_X with CEMs. The COMS demonstrates compliance with the PM_{10} emission limit. [Regulation No. 19 §19.501 et seq., Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 43 – SN-14 PSD Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	93.5	409.5
SO_2	425.0	1861.5
NO_x	270.0	1182.6

243. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance for TRS with CEMs. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, Regulation No. 19 §19.804, and 40 CFR Part 52, Subpart E]

Table 44 – SN-14 PSD TRS Rates

Pollutant	lb/hr	tpy
TRS	6.6	28.9

244. The permittee will not exceed the emission rates in the following table. The COMS demonstrates compliance with the PM emission limit. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, 40 CFR Part 52, Subpart E, Regulation No. 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 45 – SN-14 PSD TRS Rates

Pollutant	lb/hr	tpy
PM	93.5	409.5

245. The permittee will not exceed the emission rates in the following table. The CEM for SO_2 and the equation in Specific Condition #264 demonstrates compliance with the hydrogen chloride emission limits. Compliance with Specific Condition #265 demonstrates compliance with the sulfuric acid emission rates. Testing showed compliance with the methanol, formaldehyde and the styrene emissions. The permittee demonstrates compliance with the TRS emissions demonstrated by use of CEMS for TRS. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 46 – SN-14 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	93.5	409.5
Formaldehyde	0.87	3.82
Hydrogen Chloride	54.50	238.71
Methanol	0.46	2.02
Styrene	0.07	0.31
Sulfuric Acid	4.20	18.40
TRS	6.6	28.9

246. Source SN-14 is subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions and 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills due to an installation date in

1989. Appendix C contains a copy of 40 CFR § 63, Subpart BB. Specific Conditions #247 through #256 contain the requirements of 40 CFR § 63, Subpart BB.

247. The permittee will not cause a discharge into the atmosphere from source SN-14 any gases which contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen. [40 CFR §60.282(a)(1)(i) and §19.304 of Regulation 19]

248. The permittee will not cause a discharge into the atmosphere from source SN-14 any gases which exhibit an opacity of 35% or greater. (Note: Specific Condition #248 requires opacity of 20%) [Regulation No. 19 §19.304 and 40 CFR §60.282(a)(1)(ii)]

249. The permittee will not cause a discharge into the atmosphere from source SN-14 any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen. [40 CFR §60.283(a)(2) and §19.304 and §19.804 of Regulation 19]

250. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from source SN-14. The span of this system will be set at 70 percent opacity. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [40 CFR §60.284(a)(1) and §19.304 of Regulation 19]

251. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged into the atmosphere from source SN-14. These systems will be located downstream of the control device and the span of these continuous monitoring system will be set as stated below. The permittee demonstrated that these monitors meet the required spans and will be required to notify the Department before modifying either monitoring system. [40 CFR §60.284(a)(2), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

a. At a TRS concentration of 30 ppm for the TRS continuous monitoring system; and

b. At 25 percent oxygen for the continuous oxygen monitoring system.

252. The permittee will calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average will be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(1) and §19.304 of Regulation 19]

253. The permittee will calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-14. These 12-hour averages will correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and will be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(2) and §19.304 of Regulation 19]

254. The permittee will correct the 12-hour average TRS concentration from source SN-14 to 8 volume percent using the following equation: [40 CFR §60.284(c)(3) and §19.304 of Regulation 19]

$$C_{corr} = C_{meas} * \left(\frac{(21 - X)}{(21 - Y)} \right)$$

where:

C_{corr} = the concentration corrected for Oxygen

C_{meas} = the concentration uncorrected for Oxygen

X = the volumetric Oxygen concentration in percentage to be corrected to 8 percent

Y = the measured 12-hour average volumetric Oxygen concentration

255. For the purpose or reports required under §60.7(c), any owner or operator subject to the provisions of this subpart will report semiannually periods of excess emissions as follows. [40 CFR §60.284(d)(1) and §19.304 of Regulation 19]

    a. All 12 -hour averages or TRS concentrations above 5 ppm by volume; and

    b. All 6-minute average opacities that exceed 35 percent. The permittee will be required to report as excess emissions all 6-minute average opacities that exceed 20% (the opacity limit allowed under Regulation 19). However, only those emissions exceeding 35% opacity would be considered possible violations of 40 CFR Part 60, Subpart BB.

256. The Administrator will not consider periods of excess emissions reported 40 CFR §60.284(d) to be indicative of a violation of §60.11(d) provided that: [40 CFR §60.284(e) and §19.304 of Regulation 19]

    a. The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions do not exceed:

        i. One percent for TRS emissions from recovery furnaces

        ii. Six percent average opacities from recovery furnaces

    b. The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

257. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the carbon monoxide emissions from source SN-14. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

258. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the oxide of nitrogen emissions from source SN-14. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

259. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the sulfur dioxide emissions from source SN-14. The Permittee will comply with the requirements of the ADEQ CEMS conditions in Appendix B. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

260. The permittee shall conduct tests every five years of the VOC emissions from source SN-14 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3. [19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

261. The permittee will maintain a minimum floor tube temperature of 400 °F on a three-hour average at source SN-14. This limit applies only when the boiler is firing in excess of 1.5 million pounds per day.

[§19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

262. The permittee will install, calibrate, maintain, and operate a continuous monitoring device to measure and record the floor tube temperature at source SN-14. The recording device will record the temperature at least once every fifteen minutes and store each hour's average in a database. The permittee will submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition #261 and the monthly average. [§19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

263. The permittee will maintain records of the black liquor solids fired at source SN-14 when not complying with the minimum floor tube temperature set in Specific Condition #261 to demonstrate whether the minimum temperature requirement is in effect. The permittee will update the records when the temperature is less than 400 °F, keep the records on-site, and make the records available to Department personnel upon request. [§19.703 and §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

264. The permittee will demonstrate compliance with the hydrogen chloride emission rates by the use of the CEMS for sulfur dioxide and the following equations: [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

$$HCl_{PPM} = \frac{(1.28 * SO_{2PPM})}{(1 + (SO_{2PPM} * 0.017))}$$

$$HCL_{lbs/hr} = HCl_{ppm} * 0.0947 * 1E-7 * DSCFH$$

265. The permittee will calculate the hourly HCl emissions using the one-hour average PPM SO_2 values obtained from the CEMS. The permittee will keep the calculations on-site and make the calculations available to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

266. A sulfur dioxide emission rate in excess of 250 ppm on a three-hour average as read by the CEMS for this pollutant is a violation of the sulfuric acid emission rate. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

267. The carbon monoxide emission limits for this source are based on 30-day rolling averages while the sulfur dioxide and the oxides of nitrogen emission limits for this source are based on 3-hour averages. Days when the unit is not operating are not included in the 30-day rolling average. [§19.501 *et seq.* of Regulation 19 and 40 CFR Part 52, Subpart E]

268. The No. 3 Recovery Boiler is also subject to 40 CFR, Part 63, Subpart MM, "National Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills." Appendix E contains a copy of Subpart MM. The requirements of 40 CFR Subpart MM are in Specific Conditions 269 to 280.

269. The permittee must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.

270. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from source SN-14. The span of this system will be set at 70 percent opacity. [Regulation No. 19 §19.304 and 40 CFR §63.864]

271. The COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(3)]

272. The COMS data must be reduced to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. [Regulation No. 19 §19.304 and 40 CFR §63.864(d)(4)]

273. The permittee must implement corrective action, as specified in the startup, shutdown and malfunction plan if the average of ten consecutive 6-minute averages result in a measurement opacity of greater than 20 percent opacity. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(1)(i)]

274. The permittee is in violation of the standards of §63.862 when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)(2)(ii)]

275. The permittee must conduct an initial performance test using the test methods and procedures listed in §63.7 and 40 CFR §63.865(a) or §63.865(b), except as provided in 40 CFR §63.865(c)(1). The permittee conducted the performance test in September 2004. [Regulation No. 19 §19.304 and 40 CFR 865]

276. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

    a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

    b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

    c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

        i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

        ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

277. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

278. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

    a. Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

    b. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

    c. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);

    d. Records of monitoring parameter ranges established for each affected source or process unit and

    e. Records certifying that an NDCE recovery furnace equipped with a dry ESP was used to comply with the gaseous organic HAP standard in 40 CFR §63.862(c)(1).

279. The permittee must submit the applicable notifications from subpart A of 40 CFR §63, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

280. The permittee must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

    a. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

    b. The permittee may combine excess emissions and/or summary reports for the mill required by subpart MM and subpart S. The permittee must submit the reports pursuant to General Condition No. 7.

Source SN-15 - No. 3 Smelt Dissolving Tank

Description

SN-15 is the No. 3 Smelt Dissolving Tank. This source is subject to 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills due an installation date of 1989.

Compliance with the scrubber parameters will demonstrate compliance with the emission rates for particulate matter, sulfur dioxide, and TRS. Compliance with the scrubber parameters will also demonstrate compliance with the opacity limit for this source. The No. 3 Smelt Dissolving Tank uses weak wash as the scrubbing medium.

The permittee has tested source SN-15 for formaldehyde emissions. The results of this test showed that any formaldehyde emissions are below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde at source SN-15. Testing for methanol emission rates will be discontinued with this permit as tests conducted on February 25, 2003, had an average methanol emission rate of 0.114 lb/hr.

Specific Conditions

281. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the VOC emission rates verified by testing as required in Specific Condition #294. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 47 – SN-15 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	9.9	43.5

282. The permittee will not exceed the emission limits in the following table. The permittee demonstrates compliance with the particulate and SO_2 emissions by operation of the scrubber and the monitoring required in Specific Condition #298. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, Regulation No. 19 §19.501 *et seq.* effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Table 48 – SN-15 PSD Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	18.7	81.9
PM	18.7	81.9
SO_2	5.1	22.3

283. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the TRS emissions by operation of the scrubber and the monitoring required in Specific Condition #298. [Regulation No. 19 §19.901 *et seq.* effective December 19, 2004, Regulation No. 19 §19.804, and 40 CFR Part 52, Subpart E]

Table 49 – SN-15 PSD TRS Rates

Pollutant	lb/hr	tpy
TRS	1.6	7.0

284. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the PM emissions by monitoring the scrubber parameters and the monitoring required in Specific Condition #298. Compliance with the methanol emission rates will be demonstrated by compliance with the monitoring of the scrubber parameters in Specific Condition #298. Ammonia emissions compliance will be demonstrated by testing required in Specific Condition #294. Formaldehyde and emissions compliance will be demonstrated by testing performed in February 25, 2003. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 50 – SN-15 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	18.7	81.9
Ammonia	45.00	197.10
Formaldehyde	0.58	2.55
Methanol	0.34	1.49
TRS	1.60	7.00

285. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this opacity limit will be demonstrated by compliance with the scrubber parameters in Specific Condition #298.

Table 51 – SN-15 Visible Emissions

SN	Limit	Regulatory Citation
15	20%	§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E

286. Source SN-15 is subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to an installation date of 1989. Appendix C contains a copy of 40 CFR §60, Subpart BB. The requirements of 40 CFR §60, Subpart BB are in Specific Conditions #287 through #291.

287. No owner or operator subject to the provisions of this subpart will cause a discharge into the atmosphere from any smelt dissolving tank any gases which contain particulate matter in excess of 0.1 g/kg black liquor solids (dry weight) [0.2 lb/ton black liquor solids (dry weight)]. Monitoring of the scrubber parameters demonstrate compliance with the PM limit and the monitoring required in Specific Condition #298. [40 CFR §60.282(a)(2) and §19.304 of Regulation 19]

288. TRS emissions from source SN-15 will not exceed 0.0168 g/kg measured as grams H_2S kg black liquor solids on a 12-hour average. The monitoring of the scrubber parameters and the CEMS demonstrates compliance with the TRS limit and the monitoring required in Specific Condition #298. [CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19]

289. The permittee will install, calibrate, maintain, and operate a monitoring device at source SN-15 for the continuous measurement of the pressure loss of the gas stream by the control equipment. The permittee must ensure the manufacturer certifies the monitoring device to be accurate to within a gage pressure of ± 500 Pascal's (ca. ± 2 inches water gage pressure). [40 CFR §60.284(b)(2)(i) and §19.304 of Regulation 19]

290. The permittee will install, calibrate, maintain, and operate a monitoring device at source SN-15 for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The permittee will ensure the manufacturer of the monitoring device certifies the device to be accurate within ±15% of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. [40 CFR §60.284(b)(2)(ii) and §19.304 of Regulation 19]

291. The permittee will record once per shift the measurements obtained from the continuous monitoring devices, Specific Conditions #289 and290, installed under 40 CFR § 63.284(b)(2). [Regulation No. 19 §19.304 and 40 CFR § 63.284(c)(4)]

292. The permittee will conduct testing every five years for TRS from source SN-15 using EPA Reference Method 16. The permittee will conduct these tests in accordance with Plant Wide Condition No. 3. [§19.804 of Regulation 19]

293. The permittee will conduct tests of the ammonia emissions from source SN-15 every five years using Method 206. All tests will take place in accordance with Plant Wide Condition No. 3. [§18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

294. The permittee shall conduct tests every five years of the VOC emissions from source SN-14 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3. [19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

295. The No. 3 Smelt Tank Vent is also subject to 40 CFR, Part 63, "Subpart MM, "National Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills." Appendix E contains a copy of 40 CFR, Part 63, Subpart MM. [§19.304 of Regulation 19 and 40 CFR §63.862(a)(1)(B)]

296. The permittee must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired. [Regulation No. 19 §19.304 and 40 CFR §63.862(a)(i)(B)]

297. The permittee must install, calibrate, maintain, and operate a Continuous Parameter Monitoring System (CPMS) that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in §63.8(c), as well as the procedures in paragraphs (e)(10)(i) and (ii) of 40 CFR §63.864. [Regulation No. 19 §19.304 and 40 CFR 40 CFR §63.864(e)]

    a. The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of ±500 Pascals (±2 inches of water gage pressure); and

b. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate.

298. During the initial performance test required in §63.865, the permittee established operating ranges for the monitoring parameters in paragraphs 40 CFR §63.864(e)(10) T. The permittee may use weak wash as the scrubbing liquor. The permittee established the following parameters for the scrubber at SN-15. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)]

Table 52 – SN-15 Scrubber Parameters

SN-15 No.3 Smelt Dissolving Tank	Scrubber Liquor Flow	Minimum 175 gpm
	Scrubber Pressure Drop (ΔP)	Minimum 2.85 in H_2O

299. The permittee may establish expanded or replacement operating ranges for the monitoring parameter values listed in 40 CFR §63.864 (e)(10) and established in paragraph 40 CFR §63.864(j)(1) or (2) during subsequent performance tests using the test methods in §63.865. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(3)]

300. The permittee unit must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values. [Regulation No. 19 §19.304 and 40 CFR §63.864(j)(4)]

301. The permittee must implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under §63.866(a) if any 3-hour average parameter value is outside the range of values established in Specific Conditions #298. [Regulation No. 19 §19.304 and 40 CFR §63.864(k)]

302. The permittee is in violation of the standards of §63.862 when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in 40 CFR §63.864 (j).

303. The permittee must conduct an initial performance test using the test methods and procedures listed in §63.7 and 40 CFR §63.865(a) or §63.865(b), except as provided in 40 CFR §63.865(c)(1). The permittee performed the initial test in September 2004. [Regulation No. 19 §19.304 and 40 CFR 865]

304. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of 40 CFR §63.866. [Regulation No. 19 §19.304 and 40 CFR §63.866(a)]

a. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

b. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

c. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:

i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

305. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1), and when a violation is noted under §63.864(k)(2). [Regulation No. 19 §19.304 and 40 CFR §63.866(b)]

306. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in paragraphs (c)(1) through (7) of 40 CFR §63.866: [Regulation No. 19 §19.304 and 40 CFR §63.866(c)]

a. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

b. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d); and

c. Records of monitoring parameter ranges established for each affected source or process unit.

307. The permittee must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart 40 CFR §63.867. [Regulation No. 19 §19.304 and 40 CFR §63.867(a)]

308. The permittee must report quarterly if measured parameters meet any of the conditions specified in paragraph (k)(1) or (2) of §63.864. This report must contain the information specified in §63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(1), and the number and duration of occurrences when the source met or exceeded the conditions in §63.864(k)(2). Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard. When no exceedances of parameters have occurred, the permittee must submit a semiannual report stating that no excess emissions occurred during the reporting period. [Regulation No. 19 §19.304 and 40 CFR §63.867(c)]

309. The permittee may combine the excess emissions and/or summary reports subpart MM and subpart S or the mill. The permittee must submit the reports pursuant to General Condition No. 7. [Regulation No. 19 §19.304 and 40 CFR § 63.867(c)(2]

Source SN-16 – No. 1A Bleachplant Vents
Source SN-17 - No. 1B Bleachplant Vents
Source SN-18 - No. 2 Bleachplant Vents

Description

The No.1A Bleachplant Vents (SN-16), the No. 1B Bleachplant Vents (SN-17) and the No. 2 Bleachplant Vents (SN-18), primarily use chlorine dioxide, oxygen, hydrogen peroxide, and sodium hydroxide for bleaching the brownstock. Individual wet scrubbers associated with SN-16, SN-17 and SN-18 control the emissions from the bleachplants. Airflow through the scrubbers is controlled indirectly by the amperage to the induced draft fans used with each scrubber. SN-16 and SN-17 have a single fan, while SN-18 has two fans which alternate in operation. White liquor or other chlorine neutralizing chemicals are used as the scrubbing liquid.

An additional bleaching stage was added to facilitate the conversion from chlorine bleaching to 100% chlorine dioxide substitution. Emissions from the Pre-bleach Washer (the No. 1B Pre-Bleach Washer) and bleach tower vents are routed to the SN-17 scrubber. Emissions from the ClO_2 storage tank vents are routed to the SN-18 scrubber. Seal tank vents are connected to the SN-17 scrubber after being collected in the Pre-bleach Washer. Emissions from the SVP R-8 ClO_2 generator are not listed as a separate source, since they are included with SN-18 controlled emissions.

This source is subject to the MACT I Cluster Rule, 40 CFR §63 Subpart S "National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry," due to the use of chlorinated compounds in the bleaching process as outlined in §63.445.

Specific Conditions

310. The permittee will not exceed the emission rates in the following table. Testing shows compliance with carbon monoxide, Specific Condition #313, emission rates. The permittee demonstrates compliance with the volatile organic compound emission rates by the required testing in Specific Condition #313 and monitoring the scrubber parameters established during the stack testing. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 53 - SN-16-18 Bleach Plant Criteria Pollutants

Pollutant	lb/hr	tpy
VOC	7.0	30.7
CO	240.4	1053.0

311. The permittee will not exceed the emission rates in the following table at these sources. The required testing, Specific Condition #312, and the scrubber parameters, Specific Condition #314, established during the testing will demonstrate compliance with the emission rates for chlorine and chlorine dioxide. Testing showed compliance with the emission limits for chloroform. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 54 – SN-16-18 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Chlorine	6.00	26.36
Chlorine Dioxide	4.00	17.58

Pollutant	lb/hr	tpy
Chloroform	16.50	72.29

312. The permittee will test sources SN-16, SN-17 and SN-18 every five years for chlorine and chlorine dioxide using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." The permittee will conduct all tests in accordance with Plant wide Condition No. 3. The permittee will also measure the scrubber liquid flow rate during the tests in order to determine parameters to demonstrate compliance with the permitted emission rates. [§18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

313. The permittee will test sources SN-16, SN-17 and SN-18 for CO using Method 10B and VOC using Method 25A every five years. The permittee will conduct the tests as required by Plant Wide Condition #3. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

314. The permittee will comply with and monitor the scrubber liquid flow rates and the amperage of the induced draft fans at sources SN-16, SN-17 and SN-18, established by the testing required by Specific Conditions #320.a and #320.b. The permittee will also record the flow rates and the fan amperage once per eight-hour shift and average the three daily readings. The permittee will keep all readings and averages on site and make the records available to Department personnel upon request. The permittee will submit the daily averages to the Department in accordance with General Provision 7. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

315. The Bleach Plant is subject to 40 CFR §63 Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. The Specific Conditions for 40 CFR §63 Subpart S are in Specific Condition #316 to #325. [Regulation No. 19 §19.304 and 40 CFR §Subpart S]

316. The permittee may use no chlorine or hypochlorite in any of the bleaching systems. [§19.304 of Regulation 19 and 40 CFR §63.445(d)(2)]

317. The equipment at each bleaching stage, of the bleaching systems listed in 40 CFR §63..644(a), where chlorinated compounds are introduced will be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in 40 CFR §63.644(c). The enclosures and closed-vent system will meet the requirements specified in Plant Wide Conditions #35 through #40. [§19.304 of Regulation 19 and 40 CFR §63.445(b)]

318. The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in 40 CFR §63.443(c) will: [§19.304 of Regulation 19 and 40 CFR §63.445(c)]

    a. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;

    b. Achieve a treatment device outlet concentration of 10 ppm or less by volume of total chlorinated HAP; or

    c. Achieve a treatment device outlet mass emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of oven-dried pulp.

319. The permittee will install, calibrate, certify, operate, and maintain according to manufacturer's specifications, a continuous monitoring system (CMS, as defined in §63.2 of this part) as specified in 40

CFR §63.453(c) and (c) and (d), except as allowed in 40 CFR §63.453(m). The CMS will include continuous recorders for measuring the recirculation flow rate and the inlet pH of the scrubbing liquor. [§19.304 of Regulation 19 and 40 CFR §63.453(a)]

320. A CMS will be operated to measure the following parameters for each gas scrubber used to comply with the bleaching requirements of §63.445(c). [§19.304 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR §63.445(c), §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

a. The scrubbing liquor at all three bleaching units will be maintained at a pH of 8.5 or greater to assure that the scrubber outlet concentration of chlorinated HAP is 10 ppm or less by volume, based on hourly averages. If the minimum pH is not met on an hourly average basis, the reason for this control failure will be determined and reported as necessary.

b. The permittee determines the gas scrubber inlet flow rate under the requirements of 40 CFR §63.453(m) by monitoring the amperage rates of the draft fans. The permittee will maintain the amperage rates to the induced draft fans associated with the three scrubbers above the minimum and below the maximum rates listed below:

Table 55 - SN-16-18 Induced Fan Amperage

SN	Minimum Amperage	Maximum Amperage
16	65 amperes	105 amperes
17	50 amperes	105 amperes
18	30 amperes	80 amperes

c. The flow rates of the scrubbers will be maintained at the following recirculation rates or higher for the three scrubbers:

Table 56 - SN-16-18 Scrubber Flow Rates

Source No.	Flow Rate
SN-16	300 gallons/minute
SN-17	300 gallons/minute
SN-18	350 gallons/minute

321. The flow of gaseous effluent into the scrubbers will be determined indirectly by the amperage measured on the induced draft fans that blow pollutants to the Bleach Plant Scrubbers (SN-16, SN-17 and SN-18). To ensure compliance with Subpart S, the substituted parameter will be monitored for effectiveness with the following tests and inspections: [§19.304 of Regulation 19 and 40 CFR §63.453(a)]

a. An annual pressure differential test will be performed to ensure that the Bleach Plant Scrubber fans maintain the required negative pressure across the system;

b. Monthly visual inspections under the Leak Detection and Repair plan for the Scrubber fans and associated process;

c. Periodic preventive maintenance of the Bleach Plant Scrubber fan to ensure proper operation;

d. An initial performance test to determine the acceptable range of electrical current to the fans that provides an acceptable pressure differential across the Scrubber system and demonstrates compliance with the provisions of Specific Condition #249; and

e. The gas scrubber liquid influent flow rate.

322. As an option to the requirements specified in 40 CFR §63.450(c), the permittee may opt to measure the chlorine outlet concentration of each gas scrubber used to comply with the bleaching system outlet concentration requirement specified in §63.445(c)(2). [§19.304 of Regulation 19 and 40 CFR §63.453(d)]

323. The closed vent system must comply with the requirements of Plant Wide Conditions 42 through 52 [Regulation No. 19 §19.304 and 40 CFR § 63.453(k)]

324. The permittee shall set the flow indicator on each bypass line specified in §63.450(d)(1) to provide a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. [Regulation No. 19 §19.304 and 40 CFR §63.455(e)]

325. The permittee will comply with the recordkeeping requirements specified in Plant Wide Conditions #51 through #53. [Regulation No. 19 §19.304 and 40 CFR §63.455]

Source SN-20 - ERCO ClO_2 Generator

Description

SN-20 is the ERCO ClO_2 Generator. The permit allows Domtar to operate the chlorine dioxide generator at capacity for 8,760 hours per year. Therefore, Domtar keeps no annual records for this source. Domtar will demonstrate compliance by the required testing and monitoring for this source. Domtar performed testing for volatile organic compounds from this source in the past. VOCs were below the detection level.

Specific Conditions

326. The permittee will not exceed the emission rates in the following table. Testing required in Specific Condition #327 will demonstrate compliance with these emission rates. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 57 – SN-20 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Chlorine	0.30	1.32
Chlorine Dioxide	3.00	13.14

327. The permittee will conduct testing for chlorine and chlorine dioxide emissions from source SN-20 using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." The permittee will test the source in accordance with General Condition No. 3. During the testing, the permittee will monitor the temperature of the absorption water in order to determine a maximum temperature that demonstrates compliance with the emission rates found in Specific Conditions #326. The permittee will repeat the testing every five years. [§19.702, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

328. The permittee will record the temperature of the absorption water once per eight-hour shift to demonstrate compliance with Specific Condition #327. The permittee will keep the records on-site and make the records available to Department personnel upon request. [§19.705, 40 CFR Part 52, Subpart E, §18.1004 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-21 - Effluent Treatment Lagoons

Description

SN-21 designates the emissions from the surface of the Effluent Treatment Lagoons.

Specific Conditions

329. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by the required monitoring of this source in Specific Condition #333. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 58 – SN-21 Maximum Criteria Emission Rates

Pollutant	lb/hr	Tpy
VOC	12.8	55.7

330. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by the required monitoring of this source in Specific Condition #333. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 59 – SN-21 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	Tpy
Chloroform	6.80	29.60
Formaldehyde	0.46	2.02
Methanol	5.50	24.00

331. Compliance with the shower water in Specific Condition #342 and the white water concentration tests in Specific Condition #379 will be deemed compliance with the emission rates for source SN-21. [§19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and/or §18.1004 of Regulation 18]

332. The requirements of this section apply to owners or operators of Kraft processes subject to the requirements of 40 CFR Subpart S--National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. Appendix D contains a copy of 40 CFR Subpart S. [§19.304 of Regulation 19 and 40 CFR §63.446(a)]

333. The permittee will conduct daily monitoring of the site-specific parameters established according to the procedures specified in paragraph (n) of 40 CFR §63.453 and perform the following monitoring procedures: [§19.304 of Regulation 19 and 40 CFR §63.453(j)(2)]

    a. On a daily basis, monitor the following parameters for each biological treatment unit:

        i. On a daily basis, the permittee will monitor the outlet COD from the first aeration pond. If the COD exceeds 634 mg/l, the permittee will implement the procedures for parametric excursions listed in 40 CFR §63.453(p);

ii. On a daily basis, the permittee will monitor the horsepower-hours applied to the effluent treatment system. If the total horse-power hours falls below 111,600 hp-hr, the permittee will implement the procedures for parametric excursions listed in 40 CFR §63.453(p);

iii. Inlet liquid flow; and

iv. Liquid temperature.

b. The permittee will obtain daily inlet and outlet liquid grab samples from each biological treatment unit to have HAP data available to perform quarterly percent reduction tests specified in paragraph (j)(2)(ii) of §63.453(j) (Specific Condition #333.b.ii.1) and the compliance percent reduction tests specified in paragraph (p)(1)(i) of §63.453(j) (See Specific Condition #333.b.i and #333.b.ii). The permittee will perform the following procedures with the liquid samples:

i. Store the samples for 5 days as specified in §63.457(n). The 5 days storage requirement is required since the soluble BOD_5 test requires 5 days to obtain results. If the results of the soluble BOD_5 test are outside of the range established during the initial performance test, then the archive sample will be used to perform the percent reduction test specified in §63.457(l).

ii. Perform the percent reduction test procedures specified in §63.457(l) within 45 days after the beginning of each quarter as follows:

1. The percent reduction test performed in the first quarter (annually) will be performed for total HAP and the percent reduction obtained from the test will be at least as great as the total HAP reduction specified in §63.446(e)(2).

2. The remaining quarterly percent reduction tests will be performed for methanol and the percent reduction obtained from the test will be at least as great as the methanol reduction determined in the previous first-quarter test specified in paragraph §63.453(j)(2)(ii)(A) (Specific Condition #333.b.ii).

334. The parameter values used to calculate the percent reductions required in paragraphs §63.453 (j)(2)(ii)(A) and §63.453 (j)(2)(ii)(B) (Items in Specific Condition #333.b.ii.1 and Specific Condition #333.b.ii.2, respectively) will be parameter values measured and samples taken in paragraph §63.453 (j)(1) of this section.

335. Each owner or operator of a biological treatment system complying with 40 CFR §63.453(j) will perform all the following requirements when the monitoring parameters specified in paragraphs §63.453 (j)(1)(i) through §63.453 (j)(1)(iii) are below minimum operating parameter values or above maximum operating parameter values established in paragraph (n) of §63.453. [§19.304 of Regulation 19 and 40 CFR §63.453(p)]

a. The following will occur and be recorded as soon as practical:

i. Determine compliance with §63.446(e)(2) using the percent reduction test procedures specified in paragraph §63.457(l) and the monitoring data specified in paragraph (j)(1) of §63.453 that coincide with the time period of the parameter excursion;

ii. Steps will be taken to repair or adjust the operation of the process to end the parameter excursion period; and

iii. Steps will be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.

336. A parameter excursion is not a violation of the applicable emission standard if the percent reduction test specified in paragraph (p)(1)(i) of §63.453 demonstrates compliance with §63.446(e)(2), and no maintenance or changes have been made to the process or control device after the beginning of a parameter excursion that would influence the results of the determination.

337. The permittee will treat the pulping system condensate listed in Plant Wide Condition #26 by discharging the condensate below the liquid surface of a biological treatment system and treating the condensate to reduce or destroy the total HAPs by at least 92 percent or more by weight. [Regulation No. 19 §19.304 and 40 CFR §63.446(e)]

Source SN-22 - No. 1A and 1B Brownstock Washers Vents

Source Description

Source SN-22 consists of the drum and belt washers used to wash the spent cooking chemicals from the brownstock. The liquid formed in this washing process is weak black liquor. The Weak Black Liquor Tanks (SN-36) store the weak black liquor from the washing process. No control equipment is associated with the brownstock washers.

Specific Conditions

338. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by Specific Condition #340. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 60 – SN-22 Maximum Criteria Emission Rates

Pollutant	lb/hr	Tpy
VOC	59.2	259.1

339. The permittee will not exceed the emission rates in the following table. Testing required in Specific Condition #341 demonstrates compliance with the acetone and methanol emission rates. The permittee demonstrated compliance with the formaldehyde emission rates by testing. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 61 – SN-22 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	Tpy
Acetone	8.80	38.60
Formaldehyde	0.20	0.88
Methanol	59.00	258.20

340. Compliance with the VOC emissions is compliance with the methanol emission rates at source SN-22. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

341. The methanol concentration in the shower water at source SN-22 will not exceed 300 ppm and the acetone concentration will not exceed 200 ppm. The permittee demonstrates compliance with the testing required in Specific Condition #342. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

342. The permittee will test the shower water at source SN-22 at least once each year to obtain the methanol and the acetone concentrations using Method 25D or NCASI Method DI/MEOH-94-02, Methanol in Process liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC and to demonstrate compliance with Specific Condition #341. The Department may use the test results for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. If test results exceed the concentrations established in Specific Condition #341, the permittee must test weekly for that pollutant for ten consecutive weeks. The

permittee must receive written permission from the Department before decreasing the frequency of the testing. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-23 - Storage Tank
Source SN-25 - Storage Tank
Source SN-26 - Storage Tank
Source SN-28 - Storage Tank

Source Description

These tanks store various chemicals used at this facility. The former SN-24 tank is no longer in operation. Throughput records will demonstrate compliance with the emission rates.

Source SN-23, installed in 1989, is subject to the provisions of 40 CFR Part 60, Subpart Kb, due to its size and its date of installation. None of the other storage tanks listed in this section are subject to any of the New Source Performance Standards.

Specific Conditions

343. The permittee will not exceed the emission rates in the following table. The permittee shows compliance with these emission rates by compliance with Specific Conditions #349 and #360. [Regulation No. 19 §19.501 *et seq*. and 40 CFR Part 52, Subpart E]

Table 62 – Storage Tanks Maximum Criteria Emission Rates

SN	Pollutant	lb/hr	Tpy
23	VOC	1.0	4.0
28	VOC	0.2	0.9

344. The permittee will not exceed the emission rates in the following table. The permittee shows compliance with these emission rates by the through put limits of Specific Conditions #349. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 63 – Storage Tanks Maximum Non-Criteria Emission Rates

SN	Pollutant	lb/hr	Tpy
23	Methanol	0.91	4.00
24	Ammonia	0.10	0.10
25	Phosphoric Acid	0.01	0.10
26	Sulfuric Acid	0.10	0.44

345. Source SN-23 is subject to the regulations of 40 CFR, Part 60, Subpart A, General Provisions, and 40 CFR Part 60, Subpart Kb, Standards of Performance due to a capacity greater than 40 m^3 and an installation date after July 23, 1984. Appendix G contains a copy of Subpart Kb. Applicable provisions of Subpart Kb are in Specific Conditions #346 and #347.

346. The permittee will keep readily accessible records showing the dimension of this storage vessel and an analysis showing the capacity of the storage vessel. [§19.304 and §60.116b(b)]

347. The permittee will notify the Administrator within 30 days when the maximum true vapor pressure exceeds 27.6 kPa. The vapor pressure may be obtained from standard reference texts, determined by ASTM Method D2879-83, measured by an appropriate method approved by the Administrator, or calculated by an appropriate method approved by the Administrator. The appropriate MSDS may be used to determine the vapor pressure of the material stored at source SN-23. [§19.304 and §60.116b(b)]

348. The permittee will store only methanol at SN-23. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

349. The permittee will not exceed 18,850,000 pounds of methanol usage at SN-23 in any consecutive twelve-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

350. The permittee will maintain records of methanol throughput at source SN-23 in order to demonstrate compliance with Specific Condition #349. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

351. The permittee will store only ammonia at source SN-24. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

352. Ammonia throughput at source SN-24 will not exceed 800,000 lbs in any consecutive twelve-month period. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-304 and §8-4-311]

353. The permittee will maintain records of the ammonia throughput at source SN-24 in order to demonstrate compliance with Specific Condition #352. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

354. The permittee will store only nutrient solutions containing phosphoric acid at Source SN-25. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

355. Throughput of phosphoric acid at source SN-25 will not exceed 1.5 million pounds in any consecutive twelve-month period. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

356. The permittee will maintain records of the phosphoric acid throughput at source SN-25 in order to demonstrate compliance with Specific Condition #355. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

357. The permittee will store only sulfuric acid at source SN-26. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

358. Throughput of sulfuric acid at source SN-26 will not exceed 105,120,000 pounds in any consecutive twelve-month period. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

359. The permittee will maintain records of the sulfuric acid throughput at source SN-26 in order to demonstrate compliance with Specific Condition #358. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

360. The permittee will store only formic acid at source SN-28. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

361. Throughput of formic acid at source SN-28 will not exceed 5,336,000 pounds in any consecutive twelve-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

362. The permittee will maintain records of the formic acid throughput at source SN-28 in order to demonstrate compliance with Specific Condition #361. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR 70.6]

Source SN-29 - Recausticizer Vents

Description

The Recausticizer vents are Source SN-29. Normal operation of the two recausticizers includes slaking of lime with green liquor from one of the recovery boilers.

Scrubbers provide emission controls for the slakers on both of the recausticizers lines. While workers are in the kilns for inspection or maintenance, the scrubbers may also receive the vents from the lime silos that normally vent to the kilns in order to minimize dusting in the area.

Specific Conditions

363. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #365. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 64 – SN-29 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	3.0	12.8

364. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #365. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 65 – SN-29 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Acetaldehyde	0.51	2.24
Ammonia	18.0	78.8
Methanol	2.40	10.52

365. The permittee will not process in excess of 420,500 tons of lime at source SN-29 in any consecutive twelve-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

366. The permittee will maintain records of the amount of lime processed at source SN-29 to demonstrate compliance with Specific Condition #365. The Department may use the records for enforcement purposes. The permittee will update the records no later than the tenth day of the month following the month the records represent, keep the records on-site, and make the records available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Sources SN-30A, SN-30B, SN-30C, SN-30D, SN-30E and SN-30F - PCC Carbonators

Description

The PCC Plant receives lime via rail or truck and stores the lime in on-site silos. The precipitated calcium carbonate (PCC) plant scrubs carbon dioxide from the two lime kiln stacks to manufacture PCC. The process takes the stack gases from either kiln, scrubs the gases to remove particulates, cools the gases to maintain product quality and reacts the gases with the slacked lime to produce PCC. The PCC is then stored in tanks until pumped to one of the paper machines.

The PCC plant is not a combustion source, and testing showed that NO_x and VOC emissions decrease as they are processed through the calcium carbonate production process. Testing for TRS and SO_2 on similar plants showed reductions as high as 80%. Particulate emissions from each lime kiln are also reduced in the primary scrubbers and the subsequent scrubbing in the PCC process. The only emissions actually created in the PCC area are particulates. Because of the large reduction in particulate from the primary scrubbers, the net effect on particulate emissions is a large reduction.

Currently, there are six PCC Carbonators located at this facility. The PCC process does not create any new emissions. The lime kiln exhaust gases cause all emissions. Therefore, the annual emissions for these sources are included in the lime kiln emissions (SN-02). The hourly rates have been "bundled" for these individual sources.

Specific Conditions

367. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates with the required testing in Specific Conditions #369 and #370. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 66 - SN-30A-E Maximum Criteria Emission Rates

SN	Pollutant	lb/hr
30A, 30B, 30C, 30D, 30E and 30F	PM_{10}	4.8
	SO_2	2.4
	VOC	12.6
	CO	54.6
	NO_X	65.4

368. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by the required testing in Specific Conditions #369 and #370. [§18.801 of Regulation 18, §19.501 *et seq.,* §19.804 and §19.901 et seq. of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 67 - SN-30A-E Maximum Non-Criteria Emission Rates

SN	Pollutant	lb/hr
30A, 30B, 30C, 30D, 30E and 30F	PM	4.8
	TRS	0.36

369. The permittee will test two of the PCC Carbonators every five years for the pollutants listed below using the indicated EPA Reference Methods. The Department reserves the right to determine which of the PCC Carbonators to test. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, or §18.1002 of Regulation 18 and A.C.A. §8-4-204 as referenced by §8-4-304 and §8-4-311]

Table 68 – SN-30A-E EPA Reference Methods

Pollutant	EPA Reference Method
SO_2	6C
VOC	25A
NO_X	7E
CO	10B

370. The permittee will test two of the PCC Carbonators every five years for particulate matter using EPA Reference Methods 5 and 202. The PM_{10} test will use either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM_{10}, the facility will assume all collected particulate is PM_{10}. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

Source SN-36 - Weak Black Liquor Tanks

Description

Emissions for SN-36 are from the Weak Black Liquor Tanks. The weak black liquor washing lines send the weak black liquor to one of the weak black liquor tanks before sending the weak black liquor to the recovery process. No control equipment is associated with any of the weak black liquor tanks.

Specific Conditions

371. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #374. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 69 - SN-36 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	7.3	32.0

372. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #374. [§18.801 of Regulation 18, §19.901 et seq. of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 70 - SN-36 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
TRS	0.1	0.5

373. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #374. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 71 - SN-36 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Methanol	6.30	27.60

374. The temperature at source SN-36 will not exceed 203° F. [§19.703 of Regulation 19 and 40 CFR Part 52, Subpart E or §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

375. The permittee will install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the temperature at source SN-36. The Department may use the records for enforcement purposes. The permittee will keep the records on-site, and make the records available to Department personnel upon request. [§19.703 of Regulation 19 and 40 CFR Part 52, Subpart E, §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-37 - Pulp Dryer Hood and Vacuum Exhausts

Description

SN-37 consists of the Pulp Dryer Hood and Vacuum Exhausts. The main emissions from this source consist of residual methanol carried over from the bleaching process. The former exhaust fan, hood fans, and vacuum pump exhausts emit the pollutants. No control equipment is associated with the pulp drying process.

Specific Conditions

376. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by complying with Specific Condition #378 for VOC concentrations in the white water. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 72 - SN-37 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	4.7	20.5

377. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by complying with Specific Condition #378 for VOC concentrations in the white water. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 73 - SN-37 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Acetaldehyde	0.70	3.10
Methanol	2.60	11.40

378. The VOC concentration in the white water at source SN-37 will not exceed 20 ppm. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

379. The permittee will test the white water at source SN-37 using Method 25D at least once each year in order to demonstrate compliance with Specific Condition #378. [Regulation No. 19 §19.702 and 40 CFR Part 52, Subpart E]

380. The permittee will maintain records of the results from the white water testing. The Department may use the records for enforcement purposes. The permittee will keep the records on-site and make the records available to Department personnel upon request. If test fails, the permittee will test weekly until the test results do not exceed 20 ppm for ten consecutive tests. The permittee must receive written permission from the Department before decreasing the frequency of testing. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-38 - No. 2 and No. 3 Wood Yards

Description

The No. 2 and No. 3 Wood Yards provide storage for logs brought on-site. The wood yard also processes the logs for use in making pulp and fuel for the boilers (mainly bark). No control equipment is associated with the wood yards.

Specific Conditions

381. The permittee will not exceed the emission rates in the following table. Compliance with Specific Condition #382 demonstrates compliance with emission limits. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 74 - SN-38 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	123.0	540.0

382. The permittee will not process in excess of 4,320,000 tons of wood chips in any consecutive twelve-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

383. The permittee will maintain records of the amount of wood chips processed at the wood yards in order to demonstrate compliance with Specific Condition #382 The Department may use the records for enforcement purposes. The permittee will update the records no later than the tenth day of the month following the month which the records represent, keep the records on-site, and make the records available to Department personnel upon request. The permittee will submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Source SN-40 - No. 1A and No. 1B Digester Chip Fill Exhausts

Description

SN-40 includes the No. 1A and No. 1B Digester Chip Fill Exhausts. The digesters cook the wood chips under pressure with white liquor and black liquor. Emissions result while blowing the chips from the digesters to the blow tanks. No control equipment is associated with this source.

Specific Conditions

384. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #387. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 75 - SN-40 Maximum Criteria Emission Rates

Pollutant	lb/hour	tpy
VOC	10.0	44.0

385. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #387. [§18.801 of Regulation 18 and §19.901 *et seq.* of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 76 - SN-40 Maximum Non-Criteria Emission Rates

Pollutant	lb/hour	tpy
Methanol	5.75	25.1
TRS	2.02	8.80

386. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #387. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 77 - SN-40 Maximum Non-Criteria Emission Rates

Pollutant	lb/hour	tpy
Methanol	5.75	25.1

387. The spacing of the digester blows will not fall below 25 minutes. If permittee blows the digesters in less than 25 minutes apart, the Director will consider a violation of the emission rates for this source occurred. [§19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §804-311 and/or §18.1004 of Regulation 18]

388. The permittee will maintain records of the spacing of the digester blows in order to demonstrate compliance with Specific Condition #385. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department

personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-41 - Sludge Landfill

Description

SN-41 is the Sludge Landfill. The mill landfills sludge from the mill at the Sludge Landfill. The hourly emission rates are for a worst-case scenario.

Specific Conditions

389. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #391. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 78 - SN-41 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	11.6	51.0

390. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #391. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 79 - SN-41 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Methanol	0.28	1.23

391. The permittee will not place in excess of 344,000 cubic yards (163,000 tons) of sludge in the landfill in any consecutive twelve-month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

392. The permittee will maintain records of the amount of sludge placed in the landfill to demonstrate compliance with Specific Condition #391. The Department may use the records for enforcement purposes. The permittee may use the records required by Solid Waste Division at the Department to fulfill this recordkeeping requirement. The permittee will keep the records on-site and make the records available to Department personnel upon request. The permittee will submit an annual total and each quarter's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Source SN-42 - No. 2 Decker

Description

The No. 2 Decker thickens the brownstock before routing to one of the brownstock high-density storage tanks. No control equipment is associated with this source.

Specific Conditions

393. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #395. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 80 - SN-42 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	5.6	24.5

394. The permittee will not exceed the emission rates in the following table. The permittee demonstrates compliance with these emission rates by compliance with Specific Condition #395. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 81 - SN-42 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Acetone	7.50	32.90
Methanol	3.30	10.10

395. The methanol concentration in the shower water at source SN-42 will not exceed 300 ppm and the acetone concentration will not exceed 200 ppm. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

396. The permittee will test the shower water at source SN-42 at least once each year to obtain the methanol and the acetone concentrations and to demonstrate compliance with Specific Conditions #393 and #394. The permittee may use NCASI Method DI/MEOH-94-02, Methanol in Process liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC for methanol. If one of the tests is failed, the permittee will test weekly for that pollutant until passing the test for ten consecutive tests. The permittee must receive written permission from the Department before decreasing the frequency of testing. [Regulation No. 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

397. The permittee will keep records of the results for the testing in Specific Condition #396. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. [[Regulation No. 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-43 - Tub Grinder

Description

The Tub Grinder (SN-43) grinds various wood waste products at this facility. Diesel fuel powers the tub grinder's engine. No control equipment is associated with this source.

Specific Conditions

398. The permittee will not exceed the emission rates in the following table. The hourly emission rates were based upon the use of diesel fuel at maximum capacity of the equipment. The permittee demonstrates compliance with these emission rates by compliance with Specific Conditions #400 and #401. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 82 - SN-43 Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
PM_{10}	0.9	2.9
SO_2	1.1	4.8
VOC	0.5	1.6
CO	8.0	25.8
NO_X	12.0	38.7

399. The permittee will not exceed the emission rates in the following table. The hourly emissions are based upon the use of diesel fuel at maximum capacity of the equipment. The permittee demonstrates compliance with these emission rates by compliance with Specific Conditions #400 and #401. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 83 - SN-43 Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
PM	0.9	2.9

400. Diesel fuel is the only fuel for the tub grinder. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

401. The permittee will not use in excess of 258,000 gallons of diesel fuel at the tube grinder in any consecutive twelve-month period. The permittee demonstrates compliance by the recordkeeping required in Specific Condition #402. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

402. The permittee will maintain records of the amount of diesel fuel used at the tub grinder. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and make the records available to Department personnel upon request. The permittee will submit an annual total and each individual month's data to the Department in accordance with General

Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Sources SN-44a, SN-44b, SN-44c and SN-44d - Paper Machines

Description

The mill has four Paper Machines of varying sizes. No control equipment is associated with the paper machines.

The permittee conducted tests in September of 1997 for emissions of several HAPs. The tests detected no HAP emissions. However, previous tests detected methanol emissions at sources SN-44b, SN-44c, and SN-44d. Therefore, the permit contains methanol emission limits for those sources based on the previous testing.

A mist eliminator has been added to SN-44d, consisting of a separator chamber to collect condensed water and fibers. The exhaust, provided by a 15,000 cfm fan, will consist of moist air. The mill installed some false ceilings above other exhaust fans to minimize condensation on the paper.

Specific Conditions

403. The permittee will not exceed the emission rates in the following table. The hourly emission rates were based on maximum capacity of the equipment. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition #405. [Regulation No. 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Table 84 - SN-44a-d Maximum Criteria Emission Rates

SN	Pollutant	Fan #	lb/hr per fan	lb/hr total	tpy
44a	VOC	1 2 3, 4 5	0.7 0.6 0.4 0.3	2.0	8.8
44b	VOC	1, 2, 3, 8 4 5 6, 7	0.7 0.6 0.5 0.4	4.7	20.6
44c	VOC	1, 2, 3, 4 5, 6, 7 8, 9	0.7 0.6 0.5	5.6	24.6
44d	VOC	1, 2 3 4, 5 6, 7, 8, 9 10, 11, 12 13, 14, 15, 16, 17	0.8 0.7 0.5 0.4 0.3 0.2	6.8	29.8

404. The permittee will not exceed the emission rates in the following table. The hourly emissions are based on maximum capacity of the equipment. The permittee demonstrates compliance with the emission rates by compliance with Specific Condition # 408 [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 85 - SN-44a-d Maximum Non-Criteria Emission Rates

SN	Pollutant	Fan #	lb/hr per fan	lb/hr total	tpy
44a	Methanol	1 2 3, 4 5	0.7 0.6 0.4 0.3	2.40	10.6
44b	Methanol	1, 2, 3 4 5 6, 7	0.7 0.6 0.5 0.4	4.00	17.52
44c	Methanol	1, 2, 3, 4 5, 6, 7 8, 9	0.7 0.6 0.5	5.60	24.53
44d	Methanol	1, 2 3 4, 5 6, 7, 8, 9 10, 11, 12 13, 14, 15, 16, 17	0.8 0.7 0.5 0.4 0.3 0.2	6.80	29.80

405. The VOC shower water concentration at source SN-44a will not exceed 2 ppm. The permittee demonstrates compliance with the emission rates by testing required by Specific Condition #406. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

406. The permittee will test for the VOC shower water concentration at source SN-44a at least once each year using a Method 25D to demonstrate compliance with Specific Condition #405. After passing the test for twelve consecutive monthly tests, the permittee may petition the Department to reduce the frequency of the testing. The permittee must receive written permission from the Department before reducing the testing frequency. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

407. The permittee must maintain records of the testing required in Specific Condition #406. The Department may use the records for enforcement. The permittee must keep the records on-site and make the records available for Department personnel upon request. The permittee will submit the results of the yearly test as required by General Condition 7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

408. The methanol content of the shower water at sources SN-44b, SN-44c, and SN-44d will not exceed 20 ppm. The permittee demonstrates compliance with the emission rates by testing required by Specific Condition #409. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

409. The permittee will test the methanol content of the shower water at sources SN-44b, SN-44c, and SN-44d at least once each year using NCASI Method DI/MEOH-94-02, Methanol in Process liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC for methanol to demonstrate compliance with Specific Condition #408. After passing 12 consecutive monthly tests, the permittee may petition the Department to reduce the frequency of the testing. The permittee must

receive written permission from the Department before reducing the testing frequency. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

410. The permittee must maintain records of the testing required in Specific Condition #409. The Department may use the records for enforcement. The permittee must keep the records on-site and make the records available to Department personnel upon request. The permittee will submit the results of the yearly test as required by General Condition 7. [Regulation No. 18 §18.1104 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source SN-45 - Oxygen Delignification System

Description

The Oxygen Delignification System (SN-45) reacts elemental oxygen with the brownstock before the bleaching process. The oxidation of the organic chemicals releases carbon monoxide and some volatile organic compounds, primarily methanol.

Specific Conditions

411. The permittee will not exceed the emission rates in the following table. The hourly emissions are based on maximum capacity of the equipment. The permittee demonstrates compliance with these emission rates by the required testing required in Specific Conditions #413 an #414. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

Table 86 - SN-45 -Maximum Criteria Emission Rates

Pollutant	lb/hr	tpy
VOC	9.1	39.9
CO	16.5	72.3

412. The permittee will not exceed the emission rates in the following table. The hourly emissions are based on maximum capacity of the equipment. The permittee demonstrates compliance with these emission rates by complying with the VOC emission rates in Specific Condition #411. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 87 - SN-45 -Maximum Non-Criteria Emission Rates

Pollutant	lb/hr	tpy
Methanol	9.11	39.90

413. The permittee will conduct testing of the VOC emissions from source SN-45 using EPA Reference Method 25A every five years to demonstrate compliance with the VOC emission rates. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

414. The permittee will conduct testing of the carbon monoxide emissions from source SN-45 every five years using EPA Reference Method 10. The permittee will conduct all tests in accordance with Plant Wide Condition No. 3. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

415. The Department deems compliance with the VOC emission rates as compliance with the methanol emission rates. [§18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Section V: COMPLIANCE PLAN AND SCHEDULE

Domtar Industries – Ashdown Mill will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

Section VI: PLANT WIDE CONDITIONS

1. The permittee will notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation No. 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation No. 19 §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) New Equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) operating equipment according to the time frames by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation No. 19 §19.702 and/or Regulation No. 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [Regulation No. 19 §19.702 and/or Regulation No. 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

   a. Sampling ports adequate for applicable test methods;

   b. Safe sampling platforms;

   c. Safe access to sampling platforms; and

   d. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee will maintain the equipment in good condition at all times. [Regulation No. 19 §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation No. 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

7. The permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation No. 19 §19.304 and 40 CFR 63.6(e)(3)]

Acid Rain (Title IV)

8. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures

established in regulations promulgated under Title IV of the Act. [Regulation No. 26 §26.701 and 40 CFR 70.6(a)(4)]

Title VI Provisions

9. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

   a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.

   b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.

   c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.

   d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

10. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]

   a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.

   b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

   c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.

   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)

   e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.

   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

11. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

12. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

    The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight

sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

13. The permittee can switch from any ozone-depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

Tire-Derived Fuel

14. The permittee may use tire-derived fuels (TDF) in the three Power Boilers: SN-01, SN-03 and SN-05. However, the total amount of TDF burned in any 24-hour period will not exceed 220 tons/24 hours for all three boilers. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6]

15. The permittee will maintain records of the usage of TDF in the three Power Boilers, SN-01, SN-03 and SN-05, to demonstrate compliance with Plant Wide Condition #14. The Department may use the records for enforcement purposes. The permittee will update the records no later than the fifteenth day of the month following the month the records represent, keep the records on-site, and provide the records to Department personnel upon request. The permittee will submit an annual total and each day's individual data to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Testing Conditions

16. The permittee is not required to test those sources not in operation for a minimum of 25% of a calendar quarter for criteria pollutants. The permittee will resume the testing schedule outline for a particular source when its operation exceeds 25% of a calendar quarter. The Department reserves the right to require testing upon the equipment's return to normal operations. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

17. The permittee is not required to test those sources for non-criteria pollutants not in operation for a minimum of 25% of a calendar quarter. The permittee will resume the testing schedule outline for a particular source when its operation exceeds 25% of a calendar quarter. The Department reserves the right to require testing upon the equipment's return to normal operations. [§18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

18. The permittee will maintain records of the operation of the sources referenced in Plant Wide Conditions #16 and #17 to demonstrate that testing is not required. The Department may use the records for enforcement purposes. The permittee keep the records on-site and provide the records to Department personnel upon request. The permittee will submit the records to the Department in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

19. For those sources using both a portable analyzer and an independent third party, the permittee will use higher of the two results to determine compliance with the applicable emission rate. If the difference of the results of the independent third party test and the test done with the portable analyzer is more than 10%, the permittee will perform future tests using an independent third party and not the portable analyzer. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

20. The permittee may submit one excess emissions report (EER) for those sources an NSPS requires the permittee to submit an EER and/or the Department's CEMS standards. The EER must contain all

information required by the applicable NSPS subpart and the Department's CEMS standards. [§19.304 and §19.705 of Regulation 19 and 40 CFR Part 60]

Standards for the Pulping System at Kraft Processes - Low Volume High Concentration Sources

21. Domtar Industries - Ashdown Mill is subject to the provisions of 40 CFR Part 63, Subpart A - General Provisions and 40 CFR Part 63, Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. Appendix D contains a copy of Subpart S. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart S]

22. The permittee will control the total HAP emissions from the Low Volume High Concentration (LVHC) systems. A LVHC system includes the digesters, turpentine recovery, evaporators steam strippers, and any other equipment serving the same the same function. [§19.304 of Regulation 19 and 40 CFR §63.443(a)(1)(i)]

23. The LVHC Equipment system listed in 40 CFR §63.443(a)(1)(i) shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in §63.443(d). The enclosures and closed-vent system shall meet the requirements specified in paragraph §63.450. [§19.304 of Regulation 19 and 40 CFR §63.443(c)]

24. The control device used to reduce total HAP emissions from each equipment system listed in 40 CFR §63.443(a)(1)(i) shall reduce the total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone. [§19.304 of Regulation 19 and 40 CFR §63.443(d)(4)]

25. Periods of excess emissions reported under §63.455 shall not be a violation of §§63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels: [§19.304 of Regulation 19 and 40 CFR §§63.443(e)(1) through (e)(4)]

    a. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

    b. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

    c. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and the HVLC systems.

26. The permittee shall treat the pulping process condensates from the following equipment systems to meet the requirements specified in 40 CFR §§63.446(c), (d), and (e): [Regulation No. 19 §19.304 and 40 CFR §63.446(b)]

    a. Each digester system;

    b. Each turpentine recovery system;

    c. Each evaporator system condensate from:

        i. The vapors from each stage where weak liquor is introduced (feed stages); and

        ii. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).

    d. Each HVLC collection system; and

e. Each LVHC collection system.

27. One of the following combinations of HAP-containing pulping process condensates generated, produced, or associated with the equipment systems listed in 40 CFR §63.446(b) shall be subject to the requirements 40 CFR §§63.446(d) and (e): [Regulation No. 19 §19.304 and 40 CFR §63.446(c)]

a. All pulping process condensates from the equipment systems specified 40 CFR §§63.446(b)(1) through (b)(5).

b. The combined pulping process condensates from the equipment systems specified 40 CFR §§63.446(b)(4) and (b)(5), plus pulping process condensate stream(s) that in total contain at least 65 percent of the total HAP mass from the pulping process condensates from equipment systems listed in paragraphs 40 CFR §§63.446(b)(1) through (b)(3).

c. The pulping process condensates from equipment systems listed in 40 CFR §§63.446(b)(1) through (b)(5) that in total contain a total HAP mass of 5.5 kilograms or more of total HAP per megagram (11.1 pounds per ton) of ODP for mills that perform bleaching.

28. The pulping process condensates from the equipment systems listed 40 CFR §63.446(b) shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified 40 CFR §§63.446(d)(1) and (d)(2). [Regulation No. 19 §19.304 and §63.446(d)]

29. Each closed collection system shall meet the individual drain system requirements specified in §§63.960, 63.961, and 63.962 40 CFR §63, Subpart RR except for closed vent systems and control devices shall be designed and operated in accordance with §§63.443(d) and 63.450, instead of in accordance with §63.693 as specified in §63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii).

a. The owner or operator subject to this subpart shall control air emissions from the individual drain system using one or a combination of the following:

i. Covers, water seals, and other air emission control equipment as specified in paragraph (b) of this section.

ii. Hard-piping.

iii. Venting of the individual drain system through a closed vent system to a control device in accordance with the following requirements:

(1) The individual drain system is designed and operated such that an internal pressure in the vapor headspace in the system is maintained at a level less than atmospheric pressure when the control device is operating, and

(2) The closed vent system and control device are designed and operated in accordance with the requirements of §63.693 in 40 CFR part 63, subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

b. Owners and operators controlling air emissions from an individual drain system in accordance with paragraph (a)(1) of this section shall meet the following requirements:

i. The individual drain system shall be designed to segregate the organic vapors from regulated material managed in the controlled individual drain system from entering any other individual drain system that is not controlled for air emissions in accordance with the standards specified in this subpart.

ii. Drain control requirements. Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:

(1) When a water seal is used, the water seal shall be designed such that either:

(2) The outlet to the pipe discharging the regulated-material extends below the liquid surface in the water seal of the drain; or

(a) A flexible shield or other device is installed which restricts wind motion across the open space between the outlet of the pipe discharging the regulated material and the drain.

(b) When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving regulated-material), the closure device shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the drain opening and the closure device.

30. The Stripper Feed Tank at No. 3 Evaporator, Hotwell at No. 2 Evaporator and the Pulp Mill Foul Condensate Tank will meet the following conditions: [Regulation No. 19 §19.304 and 40 CFR §63.446(d)(2)]

a. The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in §63.450 and routed to a control device that meets the requirements in §63.443(d); and

b. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

31. The permittee will treat the pulping system condensate listed in Plant Wide Condition #26 by discharging the condensate below the liquid surface of a biological treatment system and treating the condensate to reduce or destroy the total HAPs by at least 92 percent or more by weight. [Regulation No. 19 §19.304 and 40 CFR §63.446(e)]

32. Each HAP removed from a pulping process condensate stream during treatment and handling under 40 CFR §§63.446(d) or (e), except for those treated according to paragraph 40 CFR §63.446(e)(2) of this section, shall be controlled as specified in §63.443(c) and (d).

33. For each control device (e.g. steam stripper system or other equipment serving the same function) used to treat pulping process condensates to comply with the requirements specified in 40 CFR §63.446(e)(3) through (e)(5), periods of excess emissions reported under §63.455 shall not be a violation of 40 CFR §63.446(d), (e)(3) through (e)(5), and (f) provided that the time of excess emissions (including periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent. The 10 percent excess emissions allowance does not apply to treatment of pulping process condensates according to 40 CFR §63.446 (e)(2) of this section (e.g. the biological wastewater treatment system used to treat multiple (primarily non-condensate) wastewater streams to comply with the Clean Water Act).

34. The permittee shall evaluate all new or modified pulping process condensates or changes in the annual bleached or non-bleached ODP used to comply with paragraph 40 CFR §63.446(i) of this section, to determine if they meet the applicable requirements of this section.

35. Each enclosure and closed-vent system specified in §63.443(c) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in 40 CFR §§63.450(a) through (d). [§19.304 of Regulation 19 and 40 CFR §63.450(a)]

36. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs. [§19.304 of Regulation 19 and 40 CFR §63.450(b)]

37. Each component of the closed-vent system used to comply with §§63.443(c) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d). [§19.304 of Regulation 19 and 40 CFR §63.450(c)]

38. Each bypass line in the closed vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in §63.443 shall comply with either of the requirements in Plant Wide Conditions 39 and 40. [§19.304 of Regulation 19 and 40 CFR §63.450(d)]

39. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every fifteen minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. [to §19.304 of Regulation 19 and 40 CFR §63.450(d)(1)]

40. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal. [§19.304 of Regulation 19 and 40 CFR §63.450(d)(2)]

41. Each owner or operator subject to the standards specified in §63.443(c) and (d), 63.444(b) and (c), 63.445(b) and (c), 63.446(c), (d), and (e), 63.447(b) or §63.450(d), shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in §63.2 of this part) as specified in 40 CFR §63.453(b) through (m). The CMS shall include a continuous recorder. (Note: Some of the specific monitoring requirements may be contained in other parts of this permit.) [§19.304 of Regulation 19 and 40 CFR §63.453(a)]

42. For each enclosure opening, a visual inspection of the closure mechanism specified in §63.450(b) shall be performed at least once every thirty days to ensure the opening is maintained in the closed position and sealed. [§19.304 of Regulation 19 and 40 CFR §63.453(k)(1)]

43. Each closed-vent system required by §63.450(a) shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. [§19.304 of Regulation 19 and 40 CFR §63.453(k)(2)]

44. For positive pressure closed-vent systems or portions of closed-vent systems, the permittee shall demonstrate no detectable leaks as specified in §63.450(c) measured initially and annually by the procedures specified in §63.457(d). [§19.304 of Regulation 19 and 40 CFR §63.453(k)(3)]

45. The permittee shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in §63.457(e). [§19.304 of Regulation 19 and 40 CFR §63.453(k)(4)]

46. The valve or closure mechanism specified in §63.450(d)(2) shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line. [§19.304 of Regulation 19 and 40 CFR §63.453(k)(5)]

47. If an inspection required by 40 CFR §63.453(k)(1) through (k)(5) identifies visible defects in ductwork, piping, enclosures or connections to covers required by §63.450, or if an instrument reading of 500 parts per million by volume or greater above background concentration is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable. [§19.304 of Regulation 19 and 40 CFR §63.453(k)(6)]

    a. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

    b. The repair or corrective action shall be completed no later than fifteen calendar days after the problem is identified.

48. Each owner or operator using a control device, technique, or an alternative parameter other than those specified in 40 CFR §63.453(b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements. [§19.304 of Regulation 19 and 40 CFR §63.453(m)]

49. To establish or reestablish the value for each operating parameter required to be monitored under 40 CFR §63.453(b) through (j), (l), and (m) or to establish appropriate parameters for 40 CFR §63.453(f), (i), and (m), the permittee shall use the following procedures:

    a. During the initial performance test required in §63.457(a) or any subsequent performance test, continuously record the operating parameter.

    b. Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations.

    c. The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with (f), (i), and (m) of this section; and

    d. Provide for the Administrator's approval, the rationale for the selected operating parameter value, monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard. [§19.304 of Regulation 19 and 40 CFR §63.453(n)(1) through (n)(4)]

50. A control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under 40 CFR §63.453(a) through (n) and established under Subpart S. Except as provided in 40 CFR §63.453(p), §63.443(e), or §63.446(g), operation of the control device

below the minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions. [§19.304 of Regulation 19 and 40 CFR §63.453(o)]

Recordkeeping Requirements

51. The permittee shall comply with the recordkeeping requirements of §63.10 of subpart A of this part, as shown in Table 1, and the requirements specified in 40 CFR §63.454(b) and (d) for the monitoring parameters specified in §63.453. [§19.304 of Regulation 19 and 40 CFR §63.454(a)]

52. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

    a. Date of inspection;

    b. The equipment type and identification;

    c. Results of negative pressure tests for enclosures;

    d. Results of leak detection tests;

    e. The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);

    f. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

    g. Repair methods applied in each attempt to repair the defect or leak;

    h. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

    i. The expected date of successful repair of the defect or leak;

    j. The date of successful repair of the defect or leak;

    k. The position and duration of opening bypass line valves and the condition of any valve seals; and

    l. The duration of the use of the bypass valves on computer controlled valves. [§19.304 of Regulation 19 and 40 CFR §63.454(b)(1) through (b)(12)]

53. The permittee shall record the CMS parameters specified in §63.453 and meet the requirements specified in 40 CFR §63.454 (a) for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification. [§19.304 of Regulation 19 and 40 CFR §63.454(d)]

Test Methods and Procedures

54. An initial performance test is required for all emission sources subject to the limitations in §§63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in §63.443(d)(3) or (d)(4). [§19.304 and §19.702 of Regulation 19 and 40 CFR §63.457(a)]

55. For incinerators and fuel burning equipment, exclusively, emissions shall not exceed 20% opacity except that emissions greater than 20% opacity but not exceeding 60% opacity will be allowed for not more than six (6) minutes in the aggregate in any consecutive 60-minute period, provided that such

emissions will not be permitted more than three (3) times during any 24-hour period. [§19.503(B)(1) of Regulation 19]

MACT Rules with Future Compliance Dates

56. Before March 7, 2006, the facility shall submit an application to the Department which addresses all applicable requirements of 40 CFR § 63, Subpart DDDDD, "National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters." The Department may extend this deadline by up to one year if so requested by the permittee. Such a request shall detail why such an extension is necessary and shall contain a schedule for compliance with the MACT rule and submittal of the required application . This request shall be received by the Department no later than the above date. [§26.1011(A)(1) of Regulation 26]

57. Domtar is subject to the MACT I (Phase II) Section of 40 CFR 63, Subpart S - Standards for Hazardous Air Pollutants From the Pulp and Paper Industry with a compliance date of April 17, 2006. The permittee will submit a permit modification within 180 days of the effective date of this permit to incorporate the changes. [Regulation No. 19 §19.304 and 40 CFR §63, Subpart S]

Table 88 - Applicable Regulations

Source No.	Regulation	Description
Facility	18	Arkansas Air Code
Facility	19	SIP
Facility	26	Regulations of the Arkansas Operating Air Permit Program (Title V)
Facility	A.C.A. 8-4-101 et seq.	Arkansas Water and Air Pollution Control Act
Facility	40 CFR Part 63, Subpart S	NESHAPS for Hazardous Air Pollutants from the Pulp and Paper Industry
Facility	40 CFR Part 60, Subpart A	General Provisions
01	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
01	40 CFR 52, Subpart E	Prevention of Significant Deterioration
02	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
02	40 CFR Part 63, Subpart MM	NESHAPS for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills
02	40 CFR 52, Subpart E	Prevention of Significant Deterioration
05	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills

Source No.	Regulation	Description
05	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced after August 17, 1971
06	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
06	40 CFR 52, Subpart E	Prevention of Significant Deterioration
06	40 CFR Part 63, Subpart MM	NESHAPS for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills
08	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
08	40 CFR §52.21	Prevention of Significant Deterioration
08	40 CFR Part 63, Subpart MM	NESHAPS for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills
09	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
09	40 CFR Part 63, Subpart MM	NESHAPS for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills
12	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
14	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills

Source No.	Regulation	Description
14	40 CFR 52, Subpart E	Prevention of Significant Deterioration
14	40 CFR Part 63, Subpart MM	NESHAPS for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills
15	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
15	40 CFR 52, Subpart E	Prevention of Significant Deterioration

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated December 1, 2003.

Table 89 - Inapplicable Regulations

Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
SN-01	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam-generating unit.
SN-01	40 CFR §60.46b(h)(2)	Standards of Performance for Industrial-Commercial Steam Generating Units	This boiler does not have a federally enforceable provision that limits it to an annual capacity factor of 10% or less.
SN-01	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Heat input exceeds 100 MMBTU/hr.
3	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler was constructed before effective date.
3	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam-generating unit and constructed prior to the effective date.
3	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial Steam Generating Units	Boiler constructed prior to the effective date.
3	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and constructed prior to the effective date.
5	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam-generating unit and constructed prior to the effective date.

5	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial Steam Generating Units	Boiler constructed prior to the effective date.
5	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and constructed prior to the effective date.
6	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	This boiler is not fired with fossil fuel.
6	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam generating unit.
6	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial Steam Generating Units	Boiler constructed prior to the effective date.
6	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and constructed prior to the effective date.
11	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler's heat input capacity is less than 250 MMBTU/hr.
11	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
11	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial Steam Generating Units	Boiler constructed before the effective date.

11	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and constructed before the effective date.
12	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler's heat input capacity is less than 250 MMBTU/hr.
12	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
12	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr.
14	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler is not fired with fossil fuel.
14	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
14	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial Steam Generating Units	Boiler does not burn fossil fuels and is not in SIC 28.
14	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr.
16	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.

17	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.
18	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.
19	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Chlorine dioxide generators are not included in the affected facilities for this subpart.
20	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Chlorine dioxide generators are not included in the affected facilities for this subpart.
21	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Wastewater treatment systems are not included in the affected facilities for this subpart.
22(1A)	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Constructed prior to the effective date of this subpart.
23	40 CFR Part 60, 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	Methanol is not a petroleum liquid and source was constructed after 1978.
23	40 CFR Part 60, 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	Methanol is not a petroleum liquid and source was constructed after 1984.
23	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Methanol tanks are not included in the affected facilities for this subpart.

28	40 CFR Part 60, 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	Formic acid is not a petroleum liquid and source was constructed after 1978.
28	40 CFR Part 60, 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	Formic Acid is not a petroleum liquid and source was constructed after 1984.
28	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Tank's volume is less than 40 m3 and the liquid vapor pressure is less than 3.5 KPa.
29	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Recausticizer vents are not included in the affected sources of this subpart.
30	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
31	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
32	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
33	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.

PCC Plant	40 CFR Part 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	The PCC plant does not crush or grind nonmetallic minerals.
Turpentine Storage Tank	40 CFR Part 60, 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	Turpentine is not a petroleum liquid and source was constructed after 1978.
Turpentine Storage Tank	40 CFR Part 60, 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	Turpentine is not a petroleum liquid and the tank's capacity is less than 40,000 gallons.
Turpentine Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
Turpentine Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
Turpentine Decanter	40 CFR Part 60, 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	Turpentine is not a petroleum liquid and source was constructed after 1978.

Turpentine Decanter	40 CFR Part 60, 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	Turpentine is not a petroleum liquid and the tank's capacity is less than 40,000 gallons.
Turpentine Decanter	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
Turpentine Decanter	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
#6 Fuel Oil Day Tank	40 CFR Part 60, 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	Source constructed after 1978.
#6 Fuel Oil Day Tank	40 CFR Part 60, 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	Tank constructed after 1984.

#6 Fuel Oil Day Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
#6 Fuel Oil Day Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
#6 Fuel Oil Storage Tanks	40 CFR Part 60, 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	These tanks constructed after 1978.
#6 Fuel Oil Storage Tanks	40 CFR Part 60, 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	These tanks constructed after 1984.
#6 Fuel Oil Storage Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.

#6 Fuel Oil Storage Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
Pulp mill Pitch Dispersant Tank	40 CFR Part 60, 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	Source constructed after 1978.
Pulp mill Pitch Dispersant Tank	40 CFR Part 60, 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	Source was constructed after 1984.
Pulp mill Pitch Dispersant Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
Pulp mill Pitch Dispersant Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.

Pulp mill Defoamer Tanks	40 CFR Part 60, 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	Tanks were constructed after 1978.
Pulpmill Defoamer Tanks	40 CFR Part 60, 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	Tanks were constructed after 1984.
Pulp mill Defoamer Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
Pulp mill Defoamer Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
44	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Paper machines are not included in the subpart's affected sources.
62 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks were constructed after 1984 and have capacities less than 40,000 gallons.

62 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
62 Paper machine Lubricating and Hydraulic Oil Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
61 Paper machine Calendar Stack Reservoirs	40 CFR Part 60, 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	Tanks were constructed after 1978.
61 Paper machine Calendar Stack Reservoirs	40 CFR Part 60, 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	Tanks were constructed after 1984.
61 Paper machine Calendar Stack Reservoirs	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.

61 Paper machine Calendar Stack Reservoirs	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
62 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks have capacities less than 40,000 gallons.
62 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks were constructed before 1978 and have capacities less than 40,000 gallons.
62 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sources were constructed prior to effective date.
62 Paper machine Lubricating and Hydraulic Oil Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.

63 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.
63 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks have capacities less than 40,000 gallons.
63 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sources constructed prior to effective date.
63 Paper machine Lubricating and Hydraulic Oil Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
64 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.

64 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, 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	Tanks were constructed after 1984 and have capacities less than 40,000 gallons.
64 Paper machine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
64 Paper machine Lubricating and Hydraulic Oil Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Paper machine Retention Aid Tanks	40 CFR Part 60, 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	Retention aid is not a petroleum liquid and tanks were constructed after 1978.
Paper machine Retention Aid Tanks	40 CFR Part 60, 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	Retention Aid is not a petroleum liquid.

Paper machine Retention Aid Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
Paper machine Retention Aid Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Zinc Chloride Storage Tank	40 CFR Part 60, 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	Zinc Chloride is not a petroleum liquid or a volatile organic compound.
Zinc Chloride Storage Tank	40 CFR Part 60, 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	Zinc Chloride is not a petroleum liquid or a volatile organic compound.
Zinc Chloride Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Zinc Chloride is not a petroleum liquid or a volatile organic compound.

Zinc Chloride Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Pulp dryer Lubricating and Hydraulic Units	40 CFR Part 60, 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	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.
Pulp dryer Lubricating and Hydraulic Units	40 CFR Part 60, 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	Tanks capacities are less than 40,000 gallons.
Pulp dryer Lubricating and Hydraulic Units	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Tanks were constructed prior to the effective date of the subpart.
Woodyard Diesel Tank	40 CFR Part 60, 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	Source was constructed after 1978 and capacity is less than 40,000 gallons.

Woodyard Diesel Tank	40 CFR Part 60, 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	Source was constructed after 1984 and capacity is less than 40,000 gallons.
Woodyard Diesel Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
Woodyard Diesel Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Gasoline Room Storage Tank	40 CFR Part 60, 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	Source was constructed after 1978.
Gasoline Room Storage Tank	40 CFR Part 60, 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	Constructed after 1984 and capacity is less than 40,000 gallons.

Gasoline Room Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m3.
Gasoline Room Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Wastewater Nutrient Storage Tanks	40 CFR Part 60, 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	Nutrient is not a petroleum liquid or a volatile organic compound.
Wastewater Nutrient Storage Tanks	40 CFR Part 60, 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	Nutrient is not a petroleum liquid or a volatile organic compound.
Wastewater Nutrient Storage Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Nutrient is not a petroleum liquid or a volatile organic compound.

Wastewater Nutrient Storage Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Sodium Hypochlorite Tanks	40 CFR Part 60, 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	§19.10
Sodium Hypochlorite Tanks	40 CFR Part 60, 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	Sodium hypochlorite is not a petroleum liquid or a volatile organic compound.
Sodium Hypochlorite Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sodium hypochlorite is not a petroleum liquid or a volatile organic compound.
Sodium Hydrosulfide Storage Tank	40 CFR Part 60, 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	Sodium hydrosulfide is not a petroleum liquid or a volatile organic compound.

Sodium Hydrosulfide Storage Tank	40 CFR Part 60, 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	Sodium hydrosulfide is not a petroleum liquid or a volatile organic compound.
Sodium Hydrosulfide Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sodium hydrosulfide is not a petroleum liquid or a volatile organic compound.
Sodium Hydrosulfide Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Powerhouse Defoamer Storage Tank	40 CFR Part 60, 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	Tank capacity is less than 40,000 gallons.
Powerhouse Defoamer Storage Tank	40 CFR Part 60, 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	Source was constructed prior to 1978.

Powerhouse Defoamer Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
Powerhouse Defoamer Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
62 Fluorescent Dye Storage Tank	40 CFR Part 60, 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	Source was constructed after 1978.
62 Fluorescent Dye Storage Tank	40 CFR Part 60, 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	Tank capacity is less than 40,000 gallons.
62 Fluorescent Dye Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.

62 Fluorescent Dye Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
63 Fluorescent Dye Storage Tank	40 CFR Part 60, 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	Source was constructed after 1978.
63 Fluorescent Dye Storage Tank	40 CFR Part 60, 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	Tank capacity is less than 40,000 gallons.
63 Fluorescent Dye Storage Tank	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
63 Fluorescent Dye Storage Tank	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.

Liquid Dye Storage Tanks	40 CFR Part 60, 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	Dye tanks do not contain petroleum liquids or volatile organic compounds.
Liquid Dye Storage Tanks	40 CFR Part 60, 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	Dye tanks do not contain petroleum liquids or volatile organic compounds.
Liquid Dye Storage Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Dye tanks do not contain petroleum liquids or volatile organic compounds.
Alum Storage Tanks	40 CFR Part 60, 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	Alum is not a petroleum liquid or a volatile organic compound.
Alum Storage Tanks	40 CFR Part 60, 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	Alum is not a petroleum liquid or a volatile organic compound.

Alum Storage Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Alum is not a petroleum liquid or a volatile organic compound.
Sodium Hydroxide Storage Tanks	40 CFR Part 60, 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	Sodium hydroxide is not a volatile organic compound.
Sodium Hydroxide Storage Tanks	40 CFR Part 60, 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	Sodium hydroxide is not a volatile organic compound.
Sodium Hydroxide Storage Tanks	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sodium hydroxide is not a volatile organic compound.
Sodium Hydroxide Storage Tanks	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.

Cooling Towers	40 CFR Part 63, Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	No chromium-based water treatment chemicals are used in cooling water treatment.
No. 1A Brownstock Decker	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Source was constructed prior to the effective date.
No. 2 Brownstock Decker	40 CFR §60.284	Standards of Performance for Kraft Pulp Mills	Monitoring not feasible for deckers and concentration of TRS below 5 ppm.
No. 2 Brownstock Decker	40 CFR §60.285	Standards of Performance for Kraft Pulp Mills	Particulate and TRS standards do not apply to deckers.
37	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Pulpdryers are not included in this subpart's affected sources.
Finishing Room	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Finishing rooms are not included in the subpart's affected sources.
Shipping Operations	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Shipping operations are not included in the subpart's affected sources.
38	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Woodyards are not included in the subpart's affected sources.

Section VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement is a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated December 2, 2003.

Table 90 - Insignificant Activities

Description	Category
Wood yard Hydraulic Oil Storage Tank Betz	A-3
Betz Defoamer Storage Tanks	A-3
Betz Rx52A Storage Tanks	A-3
Betz Rx68 Storage Tanks	A-3
Betz Rx96w Storage Tanks	A-3
Betz Custom Clean B Storage Tanks	A-3
Betz Custom Clean N Storage Tanks	A-3
Nalco 7577 Tote Bins	A-3
Nalco 7634 Tote Bins	A-3
Nalco 7648 Tote Bins	A-3
Nalco 7562 Tote Bins	A-3
Nalco 7570 Tote Bins	A-3
Nalco 7678 Tote Bins	A-3
Pulp Mill Defoamer Storage Tanks	A-3
Powerhouse Defoamer Storage Tank	A-3
Pulp Mill Dispersant Storage Tanks	A-3
Powerhouse Polymer System	A-3
SMA Systems	A-3
Tote bins or other small containers used for temporary trial purposes containing chemicals with vapor pressure less than or equal to 0.5 psia	A-3
Pulp Mill Caustic Storage Tanks	A-4
Powerhouse Caustic Storage Tanks	A-4
Water Treatment Caustic Storage Tanks	A-4

Description	Category
Paper machine Caustic Storage Tanks	A-4
Miscellaneous and/or Temporary Caustic Storage Tanks Used Throughout The Facility For Cleaning Purposes	A-4
Main Laboratory	A-5
Pulp Dryer Laboratory	A-5
Bleach Plant Laboratory	A-5
Paper Machine Laboratory	A-5
Quality Assurance Laboratories found in paper machine and finishing areas	A-5
ICP Vent in Main Laboratory	A-5
Water washing of chemical drums less than or equal to 55 gallons with less than 3% by weight of the maximum container volume remaining	A-6
#3 Lime Kiln Backup Drive Motor	A-12
#2 Lime Kiln Backup Drive Motor	A-12
Cyclone and Air Separator Chambers - Converting	A-13
Emergency Diesel-powered Pump for Mill Effluent	A-1
High Density Storage Tanks	A-3
Converting Area Adhesives and Glues	A-13

Section VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation No. 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.[40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation No. 26 §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation No. 26 §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation No. 26 §26.701(C)(2)]

   a. The date, place as defined in this permit, and time of sampling or measurements;

   b. The date(s) analyses performed;

   c. The company or entity performing the analyses;

   d. The analytical techniques or methods used;

   e. The results of such analyses; and

   f. The operating conditions existing at the time of sampling or measurement.

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation No. 26 §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report

must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26 §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 CFR 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26]

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. The permittee will report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

   a. For all upset conditions (as defined in Regulation 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

      i. The facility name and location,

      ii. The process unit or emission source deviating from the permit limit,

      iii. The permit limit, including the identification of pollutants, from which deviation occurs,

      iv. The date and time the deviation started,

      v. The duration of the deviation,

      vi. The average emissions during the deviation,

      vii. The probable cause of such deviations,

      viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and

      ix. The name of the person submitting the report.

      The permittee will make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

   b. For all deviations, the permittee will report such events in semi-annual reporting and annual certifications required in this permit**.** This includes all upset conditions reported in 8a. above. The semi-annual report must include all the information as required in the initial and full report required in 8a**.** [40 CFR 70.6(a)(3)(iii)(B), Regulation No. 26 §26.701(C)(3)(b), Regulation No. 19 §19.601 and §19.602]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), §26.701(E) of Regulation No. 26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation No. 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation No. 26 §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation No. 26 §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation No. 26 §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation No. 26 §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation No. 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [40 CFR 70.6(a)(7) and Regulation No. 26 §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation No. 26 §26.701(H)]

17. If the permit allows different operating scenarios, the permittee will, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation No. 26 §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation No. 26 §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation No. 26 §26.2. [40 CFR 70.6(c)(1) and Regulation No. 26 §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation No. 26 §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee will submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation No. 26 §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;

b. The compliance status;

c. Whether compliance was continuous or intermittent;

d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and

e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation No. 26 §26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;

b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,

d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant-emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Appendix A 40 CFR 60, Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Unit

Appendix B Continuous Emission Monitoring Systems Conditions

Appendix C 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills

Appendix D 40 CFR 63, Subpart S - Standards for Hazardous Air Pollutants From the Pulp and Paper Industry

Appendix E 40 CFR 63, Subpart MM—National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills

Appendix F 40 CFR, Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971

Appendix G Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Appendix H 40 CFR Part 63, Subpart RR "National Emission Standards for Individual Drain Systems

Appendix I Subpart DDDDD, "National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters