# ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 0287-AOP-R6 Renewal #1 IS ISSUED TO: Domtar Industries Inc. - Ashdown Mill 285 Highway 71 South 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

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates Chief, Air Division Date Modified

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# List of Acronyms and Abbreviations

| A.C.A.          | Arkansas Code Annotated                     |
|-----------------|---|
| AFIN            | ADEQ Facility Identification Number         |
| CFR             | Code of Federal Regulations                 |
| СО              | Carbon Monoxide                             |
| HAP             | Hazardous Air Pollutant                     |
| lb/hr           | Pound Per Hour                              |
| MVAC            | Motor Vehicle Air Conditioner               |
| No.             | Number                                      |
| NO <sub>x</sub> | Nitrogen Oxide                              |
| PM              | Particulate Matter                          |
| $PM_{10}$       | Particulate Matter Smaller Than Ten Microns |
| SNAP            | Significant New Alternatives Program (SNAP) |
| $SO_2$          | Sulfur Dioxide                              |
| SSM             | Startup, Shutdown, and Malfunction Plan     |
| Тру             | Tons Per Year                               |
| UTM             | Universal Transverse Mercator               |
| VOC             | Volatile Organic Compound                   |
| SN              | Source Number                               |
| TDF             | Tire Derived Fuel                           |

# SECTION I: FACILITY INFORMATION

| PERMITTEE:           | Domtar Industries Inc Ashdown Mill              |
|----------------------|---|
| AFIN:                | 41-00002  |
| PERMIT NUMBER:       | 0287-AOP-R6                                     |
| FACILITY ADDRESS:    | 285 Highway 71 South<br>Ashdown, AR 71822       |
| MAILING ADDRESS:     | 285 Highway 71 South<br>Ashdown, Arkansas 71822 |
|                      | ,   |
| COUNTY:              | Little River                                    |
| CONTACT POSITION:    | Kelley R. Crouch, Sr. Process Engineer          |
| TELEPHONE NUMBER:    | (870) 898-2711 ext. 6168                        |
| REVIEWING ENGINEER:  | Wesley Crouch                                   |
| UTM North South (Y): | Zone 15: 3722.6                                 |
| UTM East West (X):   | Zone 15: 399.7                                  |

#### **SECTION II: INTRODUCTION**

#### **Summary of Permit Activity**

Domtar Industries Inc. – Ashdown Mill operates a paper mill located at 285 Highway 71 South in Ashdown, Arkansas 71822. This permit incorporates several changes to the facility. These changes include allowing weak wash to be used on the Number 2 Smelt Dissolving Tank Vent Scrubbers (SN-08), allowing petroleum coke to be burned as fuel in the No. 2 Power Boiler (SN-05), allowing No. 6 fuel oil to be burned as fuel in the #3 Lime Kiln (SN-02), and correcting various typographical errors. This modification also incorporates alternate compliance methods for 40 CFR Part 63, Subpart S under the clean condensate alternative provisions of the subpart. Finally, the facility is removing the No. 3 package boiler (SN-12) and its associated emissions from the permit.

#### **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 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 ( $\approx$  55% in No. 3 Recovery,  $\approx$  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<sub>3</sub>) 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<sub>3</sub> is sent to the lime kilns where it is calcined, driving off the CO<sub>2</sub> 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. 1, 2 and 3 Power Boilers, respectively.

The package boiler can be used to supplement steam demand during upset conditions or shutdowns of other boilers. It is 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 one package boiler 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 package boiler, SN-11, burns only natural gas and is used primarily during outages of one of the other boilers. It is 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 fall under the category of Group B insignificant activities found in Regulation 19. 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<sub>2</sub>), 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 is equipped with an SO<sub>2</sub> 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 °F 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<sub>2</sub> 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 accelators (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. These pumps and generators fall under the category of Group B insignificant activities found in Regulation 19.

# 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

| Source No.   | Regulations  |
|--|--|
| Facility   | Arkansas Air Pollution Control Code, Regulation 18,<br>effective February 15, 1999   |
| Facility   | Regulations of the Arkansas Plan of Implementation for<br>Air Pollution Control, Regulation 19, effective December<br>19, 2004 |
| Facility   | Regulations of the Arkansas Operating Air Permit<br>Program, Regulation 26, effective September 26, 2002                       |
| SN-01  | 40 CFR 60, Subpart Db and 40 CFR 63, Subpart DDDDD.<br>It is also subject to 40 CFR 52, Subpart A.                             |
| SN-02, SN-05, SN-06, SN-08, SN-<br>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-16, SN-17, SN-18 and SN-46                          | 40 CFR 63 Subpart S (MACT I)   |
| SN-02, SN-06, SN-08, SN-09, SN-<br>14 and SN-15        | 40 CFR 63, Subpart MM  |

The following table contains the regulations applicable to this permit.

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

|                    | EMISSION SUMMARY      |   |  |   |
|--------------------|-----------------------|---|--|---|
| Source Description |                       | Pollutant   | Emission Rates   |   |
| Number             | Description           | Ponutant  | lb/hr  | tpy   |
|                    |                       | PM  | 725.3  | 3154.3  |
|                    |                       | $PM_{10}$   | 725.3  | 3154.3  |
|                    |                       | $SO_2$  | 3090.4   | 8111.2  |
| Tota               | l Allowable Emissions | VOC   | 1592.9   | 3144.9  |
| 1014               | I Allowable Emissions | СО  | 2997.4   | 12880.3   |
|                    |                       | NO <sub>X</sub>   | 1877.6   | 7923.7  |
|                    |                       | Pb  | 0.03   | 0.1   |
|                    |                       | TRS   | 29.52  | 127.7   |
| A                  | HAPs                  | Acetaldehyde*<br>Benzene*<br>Chloroform*<br>Formaldehyde*<br>Hydrogen Chloride<br>Methanol*<br>Naphthalene*<br>Styrene*<br>Toluene*<br>Acetone**<br>Ammonia**<br>Barium<br>Chlorine**<br>Chlorine Dioxide**<br>Phosphoric Acid<br>Sulfuric Acid** | $\begin{array}{c} 2.4\\ 1.38\\ 23.3\\ 3.21\\ 111.45\\ 124.11\\ 1.0\\ 3.29\\ 0.02\\ \hline 16.3\\ 103.1\\ 0.84\\ 6.3\\ 7.0\\ 0.01\\ 4.36\\ \end{array}$ | $10.56 \\ 6.06 \\ 101.89 \\ 14.08 \\ 488.2 \\ 539.1 \\ 4.38 \\ 0.58 \\ 0.09 \\ \hline 71.5 \\ 451.2 \\ 3.68 \\ 27.68 \\ 30.72 \\ 0.1 \\ 32.94 \\ \hline $ |
| SN                 |                       |   | lb/hr  | tpy   |
| 01                 | No. 3 Power Boiler    | PM<br>PM <sub>10</sub><br>SO <sub>2</sub><br>VOC<br>CO<br>NO <sub>X</sub><br>Acetaldehyde   | 19.8<br>19.8<br>62.0<br>21.3<br>276.5<br>237.0<br>0.21   | 86.5<br>86.5<br>271.6<br>93.3<br>1211.1<br>1038.1<br>0.92   |

# **Emission Summary**

| EMISSION SUMMARY |                       |  |                         |                          |
|------------------|-----------------------|--|-------------------------|--------------------------|
| Source           | Description           | Pollutant  | Emission Rates          |                          |
| Number           | Description           | Tonutant   | lb/hr                   | tpy                      |
|                  |                       | Benzene<br>Naphthalene                               | 0.21<br>0.50            | 0.92<br>2.19             |
|                  |                       | ${ m PM} { m PM}_{10}$                               | 8.6<br>8.6              | 37.7<br>37.7             |
|                  |                       | SO <sub>2</sub><br>VOC                               | 13.3<br>14.6            | 58.3<br>63.9             |
| 02               | No. 3 Lime Kiln       | CO<br>NO <sub>X</sub>                                | 55.0<br>66.5            | 240.9<br>291.3           |
|                  |                       | TRS<br>Benzene                                       | 1.34<br>0.24            | 5.9<br>1.06              |
|                  |                       | Methanol<br>PM                                       | 1.31<br>343.0           | 5.74<br>1502.3           |
|                  |                       | $\begin{array}{c} PM_{10}\\ SO_2\\ VOC \end{array}$  | 343.0<br>1285.0<br>43.0 | 1502.3<br>214.0<br>241.6 |
| 03               | No. 1 Power Boiler    | CO<br>NO <sub>X</sub>                                | 164.0<br>247.5          | 718.3<br>1084.1          |
|                  |                       | Acetaldehyde<br>Barium                               | 0.77<br>0.84            | 3.38<br>3.68             |
|                  |                       | Benzene<br>PM  | 0.49 82.0               | 2.15<br>359.2            |
|                  |                       | PM <sub>10</sub><br>SO <sub>2</sub><br>VOC           | 82.0<br>983.0<br>92.0   | 359.2<br>4305.5<br>403.0 |
| 05               | No. 2 Power Boiler    | CO<br>NO <sub>X</sub>                                | 266.0<br>574.0          | 1165.0<br>2514.1         |
|                  |                       | Pb<br>Acetaldehyde<br>Benzene                        | 0.03<br>0.21<br>0.21    | 0.10<br>0.92<br>0.92     |
|                  |                       | HCl<br>Naphthalene                                   | 5.75<br>0.50            | 25.19<br>2.19            |
|                  |                       | $\begin{array}{c} PM \\ PM_{10} \\ SO_2 \end{array}$ | 84.4<br>84.4<br>286.0   | 369.7<br>369.7<br>1252.7 |
| 06               | No. 2 Recovery Boiler | VOC<br>CO  | 46.7<br>980.0           | 204.6<br>4292.4          |
|                  |                       | NO <sub>X</sub><br>TRS<br>Formaldehyde               | 309.2<br>7.4<br>0.72    | 1354.3<br>32.4<br>3.16   |
|                  |                       | HCl  | 51.2                    | 224.3                    |

|                    | EMISSION SUMMARY          |                           |                |              |
|--------------------|---------------------------|---------------------------|----------------|--------------|
| Source Description |                           | Pollutant                 | Emission Rates |              |
| Number             | Description               | Tonutant                  | lb/hr          | tpy          |
|                    |                           | Methanol<br>Sulfuric Acid | 1.18<br>3.22   | 5.17<br>14.1 |
|                    |                           | Styrene                   | 0.06           | 0.27         |
|                    |                           | PM                        | 18.0           | 78.8         |
|                    |                           | $PM_{10}$                 | 18.0           | 78.8         |
|                    |                           | SO <sub>2</sub>           | 10.6           | 46.4         |
| 0.0                |                           | VOC                       | 9.3            | 40.7         |
| 08                 | No. 2 Smelt Tank Vents    | TRS                       | 2.1            | 9.2          |
|                    |                           | Ammonia                   | 40.0           | 175.2        |
|                    |                           | Formaldehyde              | 0.36           | 1.56         |
|                    |                           | Methanol                  | 5.4            | 23.66        |
|                    |                           | PM                        | 51.0           | 223.4        |
|                    |                           | $PM_{10}$                 | 51.0           | 223.4        |
|                    |                           | $SO_2$                    | 16.7           | 73.2         |
|                    |                           | VOČ                       | 17.1           | 74.9         |
|                    |                           | СО                        | 55.0           | 240.9        |
| 09                 | No. 2 Lime Kiln           | NO <sub>X</sub>           | 68.6           | 300.5        |
|                    |                           | TRS                       | 8.0            | 35.0         |
|                    |                           | Benzene                   | 0.23           | 1.01         |
|                    |                           | Methanol                  | 1.18           | 5.17         |
|                    |                           | Formaldehyde              | 0.02           | 0.09         |
|                    |                           | Toluene                   | 0.02           | 0.09         |
|                    |                           | PM                        | 0.6            | 2.6          |
|                    |                           | $PM_{10}$                 | 0.6            | 2.6          |
| 11                 | No. 2 Package Boiler      | $SO_2$                    | 0.2            | 0.9          |
| 11                 | NO. 2 I ackage Dollel     | VOC                       | 0.3            | 1.3          |
|                    |                           | CO                        | 25.4           | 111.3        |
|                    |                           | NO <sub>X</sub>           | 27.4           | 120.0        |
| 12                 | No. 3 Package Boiler      | Source removed            |                |              |
|                    |                           | PM                        | 93.5           | 409.5        |
|                    |                           | $PM_{10}$                 | 93.5           | 409.5        |
|                    | 14 No. 2 Possovery Poilor | $SO_2$                    | 425.0          | 1861.5       |
|                    |                           | VOC                       | 137.0          | 600.1        |
| 14                 |                           | CO                        | 856.0          | 3749.3       |
| 14                 | No. 3 Recovery Boiler     | $NO_X$                    | 270.0          | 1182.6       |
|                    |                           | TRS                       | 6.6            | 28.9         |
|                    |                           | Formaldehyde              | 0.87           | 3.82         |
|                    |                           | HCl                       | 54.5           | 238.71       |
|                    |                           | Methanol                  | 0.46           | 2.02         |

|                   | EMISSION SUMMARY                         |  |                             |  |
|-------------------|--|--|-----------------------------|--|
| Source            | Description                              | Pollutant  | Emission Rates              |  |
| Number            | Description                              | Tonutunt   | lb/hr                       | tpy  |
|                   |  | Styrene<br>Sulfuric Acid                             | 0.07<br>4.2                 | 0.31<br>18.4                               |
|                   |  | $\begin{array}{c} PM \\ PM_{10} \\ SO_2 \end{array}$ | 18.7<br>18.7<br>5.1         | 81.9<br>81.9<br>22.3                       |
| 15                | No. 3 Smelt Dissolving<br>Tank           | VOC<br>TRS   | 9.9<br>1.6                  | 43.5<br>7.0                                |
|                   |  | Ammonia<br>Formaldehyde<br>Methanol                  | 45.0<br>0.58<br>0.34        | 197.1<br>2.55<br>1.49                      |
| 16, 17,<br>and 18 | No. 1A, 1B and 2<br>Bleachplant Vents    | VOC<br>CO<br>Chlorine<br>ClO <sub>2</sub>            | 32.0<br>240.4<br>6.0<br>4.0 | 141.9<br>1053.0<br>26.36<br>17.58<br>72.20 |
| 20                | ERCO ClO <sub>2</sub> Generator          | Chloroform<br>Chlorine<br>ClO <sub>2</sub>           | 16.5<br>0.3<br>3.0          | 72.29<br>1.32<br>13.14                     |
| 21                | Effluent Treatment<br>Lagoons            | VOC<br>Chloroform<br>Formaldehyde<br>Methanol        | 12.8<br>6.8<br>0.46<br>5.5  | 55.7<br>29.6<br>2.02<br>24.0               |
| 22                | No. 1A and 1B<br>Brownstock Washer Vents | VOC<br>Acetone<br>Formaldehyde<br>Methanol           | 59.2<br>8.8<br>0.2<br>59.0  | 259.1<br>38.6<br>0.88<br>258.2             |
| 23                | Methanol Storage Tank                    | VOC<br>Methanol                                      | 1.0<br>0.91                 | 4.0<br>4.0                                 |
| 24                | Ammonia Storage Tank                     | Ammonia  | 0.1                         | 0.1  |
| 25                | Nutrient Storage Tank                    | Phosphoric Acid                                      | 0.01                        | 0.1  |
| 26                | Sulfuric Acid Tanks                      | Sulfuric Acid  | 0.1                         | 0.44                                       |
| 28                | Formic Acid Tanks                        | Formic Acid  | 0.2                         | 0.9  |
| 29                | Recausticizer Vents                      | VOC<br>Acetaldehyde<br>Ammonia<br>Methanol           | 3.0<br>0.51<br>18.0<br>2.4  | 12.8<br>2.24<br>78.8<br>10.52              |
| 30<br>through     | PCC Carbonators                          | PM<br>PM <sub>10</sub>                               | 4.8<br>5.4                  | N/A <sup>1</sup>                           |

| EMISSION SUMMARY   |                              |                          |                |             |
|--------------------|------------------------------|--------------------------|----------------|-------------|
| Source Description |                              | Pollutant                | Emission Rates |             |
| Number             | Description                  | Tonutant                 | lb/hr          | tpy         |
| 35                 |                              | SO <sub>2</sub><br>VOC   | 2.4<br>12.6    |             |
|                    |                              | CO<br>NO <sub>X</sub>    | 54.6<br>65.4   |             |
|                    |                              | VOC                      | 7.3            | 32.0        |
| 36                 | Weak Black Liquor Tanks      | TRS<br>Methanol          | 0.1 6.3        | 0.5<br>27.6 |
|                    |                              | VOC                      | 4.7            |             |
| 37                 | Dulp Davon                   |                          | 4.7            | 20.5<br>3.1 |
| 57                 | Pulp Dryer                   | Acetaldehyde<br>Methanol | 0.1<br>6.3     | 3.1<br>11.4 |
| 38                 | No. 2 and No. 3<br>Woodyards | VOC                      | 123.0          | 540.0       |
|                    | No. 1A and 1D Dispatan       | VOC                      | 10.0           | 44.0        |
| 40                 | No. 1A and 1B Digester       | TRS                      | 2.02           | 8.8         |
|                    | Chip Fill Exhausts           | Methanol                 | 5.75           | 25.1        |
| 41                 | Sludge Londfill              | VOC                      | 11.6           | 51.0        |
| 41                 | Sludge Landfill              | Methanol                 | 0.28           | 1.23        |
|                    |                              | VOC                      | 5.6            | 24.5        |
| 42                 | No. 2 Decker                 | Acetone                  | 7.5            | 32.9        |
|                    |                              | Methanol                 | 3.3            | 10.1        |
|                    |                              | PM                       | 0.9            | 2.9         |
|                    |                              | $PM_{10}$                | 0.9            | 2.9         |
| 43                 | Tub Grinder                  | $SO_2$                   | 1.1            | 4.8         |
|                    | ruo Ormaci                   | VOC                      | 0.5            | 1.6         |
|                    |                              | CO                       | 8.0            | 25.8        |
|                    |                              | NO <sub>X</sub>          | 12.0           | 38.7        |
| 44a                | Paper Machine 61             | VOC                      | 2.4            | 8.8         |
| <del>-</del> τα    | r aper Machine 01            | Methanol                 | 2.4            | 8.8         |
| 44b                | Paper Machine 62             | VOC                      | 4.7            | 20.6        |
|                    | r uper muennie 02            | Methanol                 | 4.0            | 20.6        |
| 44c                | Paper Machine 63             | VOC                      | 5.6            | 24.6        |
|                    |                              | Methanol                 | 5.6            | 24.6        |
| 44d                | Paper Machine 64             | VOC                      | 6.8            | 29.8        |
| 1 TU               |                              | Methanol                 | 6.8            | 29.8        |
|                    | Oxygen Delignification       | VOC                      | 9.1            | 39.9        |
| 45                 | System                       | СО                       | 16.5           | 72.3        |
|                    | 5 y stem                     | Methanol                 | 9.11           | 39.9        |

\*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

\*\*Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

1. Annual emission rates for these sources are included in emissions for SN-02.

## **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 include 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<sub>2</sub> 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<sub>2</sub> during the calcination process which, is a major factor in removal of SO<sub>2</sub> 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.

Permit 287-AOP-R5 was issued on October 13, 2005. This permit modification 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.

# SECTION IV: SPECIFIC CONDITIONS

## SN-01 No. 3 Power Boiler

#### Source 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 shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with the  $PM_{10}$  emission rates through compliance with Specific Condition 12. The permittee shall demonstrate compliance with the VOC emission rates through compliance with Specific Condition 13. The permittee shall demonstrate compliance with the SO<sub>2</sub> emission rates through compliance with Specific Condition 6. Compliance with the CO and NO<sub>x</sub> emission rates shall be demonstrated through compliance with Specific Conditions 4.d and 5. [Regulation 19, §19.501 et seq., effective December 19, 2004 and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr | tpy    |
|------------------|-------|--------|
| PM <sub>10</sub> | 19.8  | 86.5   |
| SO <sub>2</sub>  | 62.0  | 271.6  |
| VOC              | 21.3  | 93.3   |
| СО               | 276.5 | 1211.1 |
| NO <sub>x</sub>  | 237.0 | 1038.1 |

2. The permittee shall not exceed the emission rates set forth in the following table. The lb/MMBtu rates 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 rate for CO shall be 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 shall use only the hours of stable steam production above 250,000 lb/hr. A steam production monitor shall be used to establish operational periods when stable rates are above 250,000 lb/hr. Compliance with the PM, SO<sub>2</sub>, VOC, and NO<sub>x</sub> emission rates shall be demonstrated through compliance with Specific Conditions 12, 6, 13 and 4.d respectively. [Regulation 19, §19.901 and 40 CFR Part 52, Subpart E]

| Pollutant       | Emission Limit<br>(lb/MMBtu) |
|-----------------|------------------------------|
| PM              | 0.025                        |
| SO <sub>2</sub> | 0.10                         |
| VOC             | 0.027                        |
| СО              | 0.35                         |
| NO <sub>x</sub> | 0.30                         |

3. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with the PM emission rate through compliance with Specific Condition 12. Testing indicated compliance with the acetaldehyde, benzene, and naphthalene emission rates. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| 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. This source is subject to 40 CFR Part 60, Subpart A, General Provisions and 40 CFR 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. The permittee is subject, but not limited to the following provisions: [Regulation 19, §19.304 and 40 CFR Part 60, Subpart Db]

- a. 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)]
- b. The permittee shall not exceed 20% opacity (6-minute average), except for one 6 minute period per hour of not more than 27 percent opacity. Complaince shall be demonstrated through use of a continuous opacity monitor. [40 CFR §63.43b(f) and 40 CFR Part 52, Subpart E]
- c. The particulate standard and opacity standard apply at all times except during periods of startup, shutdown or malfunction. [40 CFR §63.43b(g)]
- d. The permittee shall not emit in excess on 0.3 lb/MMBtu of  $NO_x$  while combusting natural gas with wood. [40 CFR §63.44b(d)]
- e. The  $NO_x$  emission standard applies at all times except during periods of startup, shutdown and malfunction. [40 CFR §63.44b(h)]
- f. Compliance with the NOx emission standard is determined on a 30-day rolling average basis. [40 CFR §63.44b(i)]
- g. The permittee shall 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 shall comply with the ADEQ CEMS operating conditions in Appendix B. [40 CFR §63.48b(a), Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- h. The permittee shall install, calibrate, maintain and operate a CEMS for measuring the NO<sub>x</sub> emissions discharged to the atmosphere and record the output of the system. The permittee used a CO<sub>2</sub> monitor as the diluent monitor. The permittee shall comply with the ADEQ CEMS operating conditions in Appendix B. [40 CFR §63.48b(b), Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- i. The permittee shall record and maintain records of the amounts of 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)]
- j. The permittee shall maintain records of opacity. The permittee shall maintain these records on site and make them available to Department personnel upon request. [40 CFR §60.49b(f)]
- k. The permittee shall maintain records of the following information for each steam generating unit operating day:
  - i. Calendar date.
  - ii. The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBtu heat input) measured or predicted.
  - iii. 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 oxides emission rates for the preceding thirty steam generating unit operating days.

- iv. 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 §60.44, with the reason for such excess emissions as well as a description of corrective actions taken.
- v. Identification of the steam generating unit operating days for which pollutant have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective action taken.
- vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- vii. Identification of "F" factor used for calculations, method of determinations, and type of fuel combusted.
- viii. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- ix. 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.
- x. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1. [40 CFR §60.49b(g)]
- 1. The permittee is required to submit excess emissions reports for any calendar quarter during which there are excess emissions of NO<sub>x</sub> from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. [40 CFR §60.49b(g)]
- m. The permittee shall submit a quarterly report containing the information recorded under 40 CFR §60.49(b)g) for nitrogen oxides under §60.48b. All quarterly reports must be post marked by the 30<sup>th</sup> day following the end of each calendar quarter. This report will contain the information required by Specific Condition 4(k)(i-ix). [40 CFR §60.49b(i)]
- n. The permittee shall maintain all records required under this section for a period of 2 years following the date of such record. The permittee shall maintain the records on site and make them available to Department personnel upon request. [40 CFR §60.49b(o)]
- 5. The permittee shall install, calibrate, maintain and operate a CEMS for measuring the CO emissions discharged to the atmosphere and record the output of the system. The permittee shall comply with the ADEQ CEMS operating conditions in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. The permittee shall only use 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 propylene, natural gas and tire derived fuel (TDF). Plantwide Condition 14 establishes plant wide limits on the 24-hour usage of

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

- 7. If the permittee isolates a chamber of the ESP for repair, the permittee may operate the boiler. Readings from the Continuous Opacity Monitor shall demonstrate compliance with the emission rates. [Regulation 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]
- 8. 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 shall demonstrate compliance with the emission rates. The permittee shall note in the operating record times when both ESPs are shutdown for maintenance. [Regulation 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]
- 9. 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. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 64.2(a)(1), (2) and (3)]
- 10. The heat input to source SN-01 shall not exceed 790 MMBtu/hr. The use of the following heating values of each fuel, as described in Specific Condition 11, determines the total heat input to the boiler: [Regulation 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]

| Fuel                | BTU Value               |
|---------------------|-------------------------|
| Natural Gas         | 1.02 MMBtu per 1000 scf |
| Bark and Wood Waste | 8.5 MMBtu per ton       |
| Pelletized Fuel     | 16.0 MMBtu per ton      |
| Tire Derived Fuel   | 27.0 MMBtu per ton      |

11. The permittee shall demonstrate compliance with the heat input limit in Specific Condition 10 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 shall 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 shall update the records daily, keep the records on-site, and make the records available to Department personnel upon request. The permittee shall submit an annual total and each month's individual data to the Department in accordance with

General Provision No. 7. [Regulation 19, §19.705 and §19.901 and 40 CFR Part 52, Subpart E]

- 12. The permittee shall test source SN-01 every five years for particulate matter using EPA Reference Methods 5 and 202. The PM<sub>10</sub> test shall use either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM<sub>10</sub>, the facility shall assume all collected particulate is PM<sub>10</sub>. The permittee shall conduct all tests in accordance with Plantwide Condition 3. This test shall take place with the maximum rate of bark or wood waste fuel and with a minimal amount of natural gas fuel in the boiler. [Regulation 19, §19.702, 40 CFR Part 52, Subpart E, Regulation 18, §18.1002, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 13. The permittee shall test source SN-01 every five years for volatile organic compound emissions using EPA Reference Method 25A. The permittee shall conduct all tests in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 14. 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 shall maintain a thirty-day rolling average and a twelve-month rolling average. The permittee shall 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 shall submit to the Department each 30-day average and a 12-month rolling average pursuant to General Condition 7 [Regulation 19, §19.501 and 40 CFR Part 52, Subpart E]

#### SN-02

#### No. 3 Lime Kiln

#### Source 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 and #6 fuel oil 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

15. The permittee shall not exceed the emission rates in the following table. Compliance with PM<sub>10</sub> limits shall be demonstrated by proper operation of the ESP and testing required in Specific Condition 22. Compliance with the sulfur dioxide emission rates shall be demonstrated by compliance with Specific Condition 24. Compliance with the volatile organic compounds emission rate shall be demonstrated through compliance with Specific Condition 23. Compliance with the carbon monoxide rates shall be demonstrated through compliance with Specific Condition 21. Compliance with the oxides of nitrogen emission rates shall be demonstrated through compliance with Specific Condition 31. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr | tpy   |
|------------------|-------|-------|
| PM <sub>10</sub> | 8.6   | 37.7  |
| SO <sub>2</sub>  | 13.3  | 58.3  |
| VOC              | 14.6  | 63.9  |
| СО               | 55.0  | 240.9 |
| NO <sub>x</sub>  | 66.5  | 291.3 |

16. The permittee shall not exceed the emission rates set forth 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 33.j.i) to demonstrate when the emission rates apply. The permittee shall demonstrate compliance with the PM limit by proper operation of the ESP. The permittee shall demonstrate compliance with the sulfur dioxide emission rates through compliance with Specific Condition 25. Compliance with the volatile organic compounds emission rate shall be demonstrated through compliance with Specific Condition 21. Compliance with the oxides of nitrogen emission rates shall be demonstrated through compliance with the TRS emission rate shall be demonstrated through compliance with Specific Condition 19, §19.901 and 40 CFR Part 52, Subpart E].

| Pollutant       | Emission Limit       |  |
|-----------------|----------------------|--|
| PM              | 0.034 gr/dscf**      |  |
| SO <sub>2</sub> | 0.727 lb/ton of lime |  |
| VOC             | 0.795 lb/ton of lime |  |
| СО              | 3.0 lb/ton of lime   |  |
| NO <sub>x</sub> | 3.63 lb/ton of lime  |  |
| TRS**           | 8 ppmv (dry basis)   |  |

<sup>\*\*</sup>Corrected to 10% oxygen

17. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM emission rate shall be demonstrated by proper operation of the ESP. Previous testing demonstrated compliance with the benzene and methanol limits. Compliance with the TRS limit shall be demonstrated through compliance with Specific Condition 18.c. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| PM        | 8.6   | 37.7 |
| Benzene   | 0.24  | 1.06 |
| Methanol  | 1.31  | 5.74 |
| TRS       | 1.34  | 5.9  |

- 18. This source 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. A copy of Subpart BB can be found in Appendix C. The permittee is subject, but not limited to the following provisions: [Regulation 19, §19.304 and 40 CFR Part 60, Subpart BB]
  - a. PM emissions shall 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) and 40 CFR §63.(a)(i)(C)]
  - b. Total reduced sulfur emissions from SN-02 shall not exceed 8ppm by volume on a dry basis, corrected to 10 percent oxygen. [40 CFR §60.283(a)(5) and Regulation 19, §19.804]
  - c. The permittee shall 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.
    - i. TRS Concentration of 30 ppm for the TRS continuous monitoring system, and
    - ii. At 25 percent oxygen for the continuous oxygen monitoring system.
      [40 CFR §60.284(a)(2), Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - d. The permittee shall calculate and record on a daily basis twelve-hour average TRS concentrations for the two consecutive periods of the operating day. The permittee shall 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 permittee shall keep the records on-site and make the records available to Department personnel. [40 CFR §60.284(c)(1)]
  - e. The permittee shall 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 shall 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 permittee shall keep the records on-site and make the records available to Department personnel. [40 CFR 60.284(c)(2)]

f. 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)]

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

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
  - g. For the purposes of reports required under §60.7(c), the permittee shall report semiannually periods of excess emissions from source SN-02. Periods of excess emissions are defined as 12-hour average TRS concentrations above 8 ppm by volume. [40 CFR §60.284(d)(2)]
  - h. The Director shall 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)]
- 19. Visible emissions may not exceed the limits specified in the following table as measured by EPA Reference Method 9. Compliance shall be demonstrated through the use of a COMS.

| SN | Limit | Regulatory Citation                                 |
|----|-------|---|
| 02 | 20%   | Regulation 19, §19.503 and 40 CFR Part52, Subpart E |

- 20. The permittee shall install, calibrate, maintain and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere from this source. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 21. The permittee shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions. A copy of the CEMS conditions is in Appendix B of this permit. [Regulation

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

- 22. The permittee shall test source SN-02 every five years for particulate matter using EPA Reference Methods 5 and 202. The  $PM_{10}$  test shall use either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for  $PM_{10}$ , the facility shall assume all collected particulate is  $PM_{10}$ . The permittee shall conduct all tests in accordance with Plantwide Condition 3. [Regulation 19, §19.702, 40 CFR Part 52, Subpart E, Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 23. The permittee shall test source SN-02 every five years for volatile organic compound emissions using EPA Reference Method 25A. The permittee shall conduct all tests in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 24. The permittee shall only use pipeline quality natural gas, No. 6 fuel oil, reprocessed oil and onsite generated used fuel oil as fuel to fire the No. 3 Lime Kiln. The average sulfur content of the fuel oil shall not exceed 3.0% by weight. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E, 40 CFR Part 70.6, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 25. The permittee shall either test each shipment of fuel oil or obtain the manufacturer's certification of the sulfur content of the fuel fired at this source. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 26. The permittee shall not use in excess of 7,500,000 gallons of fuel oil at SN-02 per consecutive twelve month period. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 27. The permittee shall maintain records of the amount of fuel oil fired at this source and the sulfur content of the fuel oil. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 28. The permittee shall 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 CEMS shall demonstrate compliance with the emission rates. The permittee shall note in the operating record the periods when a pre-coat filter is cleaned. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 29. The permittee shall maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-02. Compliance shall be demonstrated through compliance with Specific Condition 30. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 30. The permittee shall 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. The permittee shall update the records no later than the fifteenth day of the month following the last 30-day rolling average that the records represent. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 31. The NO<sub>x</sub> emissions shall be calculated using the equations below. The permittee shall calculate the NO<sub>x</sub> emissions at least once every 15 minutes. The average hourly NO<sub>x</sub> emission rate shall be calculated using four or more data points equally spaced over an hour. The minimum data availability shall be 95% of this kiln's operating hours. The equation below may be changed based on emissions testing after the Department approves the test results and the new equation. The information used to calculate NO<sub>x</sub> emissions for SN-02 shall be made available to Department personnel upon request. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

 $C_{NOx} = -74.5742 + (24.1788*HO) + (0.985984*N)$  $E_{NOx} = C_{NOx} * DSCF/hr * (1.194*10^{-7})$ 

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/hr = stack flow rate, dry standard cubic feet per hour 1.194\*10<sup>-7</sup> = Conversion factor, ppm NO<sub>x</sub> to lbs/dscf HO = kiln hood oxygen concentration, percent

- 32. The CO and NO<sub>x</sub> emission limits for this source are 30-day rolling averages. Days when the unit is not operating shall not be included in the 30-day rolling average. The permittee shall update the records no later than the fifteenth day following the last day of the 30-day rolling average period that the records represent. These records shall be kept on site and made available to Department Personnel upon request. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]
- 33. The No. 3 Lime Kiln is considered an affected source pursuant to 40 CFR Part 63, Subpart MM, National Emissions Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills. A copy of Subpart MM may be found in Appendix E. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]
- a. 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. [40 CFR §63.862(a)(i)(C)]
- b. The permittee must install, calibrate, maintain and operate a continuous opacity monitoring system (COMS) for SN-02. [40 CFR §63.684(d)]
- c. 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. [40 CFR §63.864(d)(3)]
- d. 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. [40 CFR §63.864(d)(4)]
- e. 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 measured opacity of greater than 20 percent. [40 CFR §63.864(k)(1)(i)]
- f. 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. [40 CFR §63.864(k)(2)(ii)]
- g. 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). This testing was performed on September 12, 2004.
- h. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains the specific procedures to be followed for operating 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 (a)(2) of 40 CFR §63.866. [40 CFR §63.866(a)]
  - i. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended, and;
  - ii. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.
  - iii. The startup, shutdown and malfunction plan must also include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:
    - 1. 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
    - 2. 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.

- i. 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 permittee shall keep these records on site and make them available to Department personnel upon request. [40 CFR §63.866(b)]
- j. In addition to the general records required by §63.10(b)(2), the owner or operator must maintain records of the information required in paragraphs (c)(1) through (c)(7) of 40 CFR §63.866:
  - i. Records of the CaO production rates in units of Mg/d r ton/d for all lime kilns;
  - ii. Records of the 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;
  - iii. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);
  - iv. Records of monitoring parameter ranges established for each affected source or process unit;
     [40 CFR §63.866(c)]
- k. The owner or operator of any affected source or process unit must submit the applicable notifications for Subpart A of this part, as specified in Table 1 of §40.867. [40 CFR §63.867(a)]
- The owner or operator must report quarterly if measured parameters meet any of the conditions specified in paragraphs (k)(1) or (k)(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.
  - i. 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.
  - ii. 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 shall submit these reports in accordance with General Provision 7 of this permit.
    [40 CFR §63.867(c)]

# SN-03

## No. 1 Power Boiler

# Source 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 pelletized 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<sub>2</sub>O. Prior testing showed the 40% opacity limit can be maintained with a  $\Delta P$  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

34. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM<sub>10</sub> limits shall be demonstrated through compliance with Specific Condition 43. Compliance with the sulfur dioxide emission rates shall be demonstrated by compliance with Specific Conditions 40. Compliance with the volatile organic compounds emission rate shall be demonstrated through compliance with Specific Condition 44. Compliance with the carbon monoxide rates shall be demonstrated through compliance with Specific Condition 45. Compliance with the oxides of nitrogen emission rates shall be demonstrated through compliance with Specific Condition 46. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr  | tpy    |
|------------------|--------|--------|
| PM <sub>10</sub> | 343.0  | 1502.3 |
| SO <sub>2</sub>  | 1285.0 | 214.0  |
| VOC              | 43.0   | 214.6  |
| СО               | 164.0  | 718.3  |
| NO <sub>x</sub>  | 247.5  | 1084.1 |

35. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM limits shall be demonstrated through compliance with Specific Condition 43. Compliance with the barium, acetaldehyde, and benzene emission rates has been demonstrated by previously performed emissions testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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

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

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

37. Visible emissions from this source may not exceed the limits specified in the following table as measured by EPA Reference Method 9 when firing fuel other than natural gas. Compliance shall be demonstrated through compliance with Specific Condition 38.

| SN | Limit | Regulatory Citation                                     |
|----|-------|---|
| 03 | 40%   | Regulation 19, §19.503 and 40 CFR Part 52,<br>Subpart E |

38. The permittee shall perform weekly observations of the opacity from this source. These observations 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 the 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 condition. These records shall be updated on a weekly basis, kept on site, and made available to Department personnel upon request.

- a. The date and time of the observation;
- b. Whether visible emissions which appeared to be above the permitted level were detected;
- c. If visible emissions which appeared to be above the permitted level 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 observations. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

39. The sulfur content of the fuel oil used as fuel at this source shall not exceed 3.0% by weight and the total SO<sub>2</sub> emissions shall not exceed 214 tons in any consecutive twelve month period, as calculated monthly from total fuel usage and batch sulfur content using the following equation.

 $SO_2$  tons = [(Fuel oil gallons/batch)(7.88 lb/gal)(Weight % S in batch/100)(2.0  $SO_2/S$ )]/2000

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

- 40. The permittee shall 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 39. The permittee shall update these records within 10 days of receipt of each batch of fuel oil. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 41. The permittee shall fire only 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) as fuel in No. 1 Power Boiler (SN-03). Plantwide Condition 14 establishes limits on the 24-hour usage of TDF. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 42. The pressure drop across the multi-clones shall not fall below 0.68 in of H<sub>2</sub>O while burning fuels other than natural gas. The permittee shall monitor and record the pressure drop across the multiclone at least once per eight-hour shift. The permittee shall note in the records when a fuel other than natural gas is being fired. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 43. The permittee shall conduct tests to verify compliance with the  $PM/PM_{10}$  emission rates for this source a minimum of once every five years. The permittee shall use EPA Reference Method 5 and 202 to demonstrate compliance with the PM limits contained in Specific Condition 35. The permittee shall use EPA Reference Methods 201A and 202 or 5 and 202 to demonstrate compliance with the  $PM_{10}$  limits contained in Specific Condition 34. By using Method 5 and 202 for  $PM_{10}$ , the facility shall assume all collected particulate is  $PM_{10}$ . Testing shall be performed pursuant to Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 44. The permittee shall conduct testing to verify compliance with the VOC emission rates from this source a minimum of once every five years. This testing shall be conducted using EPA Reference Method 25A. Testing shall be performed pursuant to Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 45. The permittee shall conduct testing to verify compliance with the CO emission rates from this source a minimum of once every five years. This testing shall be conducted using EPA Reference Method 10B. Testing shall be performed pursuant to Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 46. The permittee shall conduct testing to verify compliance with the NO<sub>x</sub> emission rates from this source a minimum of once every five years. This testing shall be conducted using EPA Reference Method 7E. Testing shall be performed pursuant to Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 47. The permittee shall not use in excess of 2,700,000 gallons of fuel oil at this source per consecutive 12-month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 48. The permittee shall maintain records of the amount of fuel oil combusted at this source. The permittee shall maintain a monthly and rolling twelve month total. These records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

#### SN-05

#### No. 2 Power Boiler

#### Source 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, petroleum coke 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<sub>2</sub>. The SO<sub>2</sub> 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<sub>2</sub> and particulate emissions, as this source has two scrubbers in parallel to control SO<sub>2</sub> 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<sub>10</sub> 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

49. The permittee shall not exceed the emission rates set forth in the following table. Compliance with  $PM_{10}$  and lead limits shall be demonstrated through compliance with Specific Condition 59. Compliance with the sulfur dioxide emission rates shall be demonstrated by compliance with Specific Condition 53. Compliance with the volatile organic compounds emission rate shall be demonstrated through compliance with Specific Condition 58. Compliance with the carbon monoxide rates shall be demonstrated through compliance with Specific Condition 57. Compliance with the oxides of nitrogen emission rates shall be demonstrated through compliance with Specific Condition 53. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr | tpy    |
|------------------|-------|--------|
| PM <sub>10</sub> | 82.0  | 359.2  |
| SO <sub>2</sub>  | 983.0 | 4305.5 |
| VOC              | 92.0  | 403.0  |
| СО               | 266.0 | 1165.0 |
| NO <sub>x</sub>  | 574.0 | 2514.1 |
| Lead             | 0.03  | 0.1    |

50. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM emission rates shall be demonstrated through compliance with Specific Condition 59. Compliance with the SO<sub>2</sub> emission rate shall be demonstrated through compliance with Specific Condition 53. Compliance with the NO<sub>x</sub> emission rate shall be demonstrated through compliance with Specific Condition 53. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant       | Emission Limit |
|-----------------|----------------|
| PM              | 0.1 lb/MMBtu   |
| SO <sub>2</sub> | 1.2 lb/MMBtu   |
| NO <sub>x</sub> | 0.7 lb/MMBtu   |

51. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM limits shall be demonstrated through compliance with Specific Condition 59. Compliance with the HCl emission rates shall be demonstrated through compliance with Specific Condition 58. Compliance with the acetaldehyde, benzene and naphthalene emission rates has been demonstrated by previously performed emissions

| 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  |

testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 52. This source is considered an affected source under 40 CFR Part 60, Subpart A and 40 CFR 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 of 250 MMBtu/hr and an installation date of 1975. A copy of Subpart D may be found in Appendix F. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304 and 40 CFR Part 60, Subpart D]
  - a. The permittee shall not cause to be discharged 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)]
  - b. Visible emission shall not exceed 20% opacity as measured by EPA Reference Method 9, except for one six-minute period per hour of not more than 27% opacity. [40 CFR §60.42(a)(1)]
  - c. The permittee shall not cause to be discharged 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)]
  - d. The permittee shall not cause to be discharged into the atmosphere any gases which contain sulfur dioxide in excess of 1.2 lb/MMBtu from any solid fossil fuel or solid fossil fuel and wood residue. [40 CFR §60.43(a)(1)]When fossil fuels are burned simultaneously in combination, the applicable SO<sub>2</sub> standard (in ng/J) shall be determined by prorating using the following formula. [40 CFR §60.43(b)]

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

where:

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

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

- e. The basis for compliance is the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR §60.43(c)]
- f. The permittee shall not cause to be discharged into the atmosphere any gases which contain nitrogen oxides, expressed as NO<sub>2</sub>, in excess of:
  - i. 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
  - ii. 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
  - iii. 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse). [40 CFR §60.44(a)(1-3)]
- g. Except as provided under Specific Condition 52.h, when different fossil fuel are burned simultaneously in any combination, the applicable NO<sub>x</sub> standard (in ng/J) is determined by prorating using the following formula. [40 CFR §60.44(b)]

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

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

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 (except lignite).

- h. 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)]
- 53. The permittee shall install, calibrate, maintain and operate continuous emissions monitoring systems for measuring SO<sub>2</sub> emissions, NO<sub>x</sub> emissions and either oxygen or carbon dioxide. The CEMS shall have readouts which demonstrate compliance with any of the applicable limits for the pollutant in question. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [40 CFR §60.45(a), Regulation 19, §19.304 and §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 54. The permittee shall submit an excess emissions report to the Director semiannually for each six-month period in the calendar year. All semiannual reports must be postmarked by the 30<sup>th</sup> day following the end of the six-month period. Each excess emissions report 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
- 55. This source is considered an affected source under 40 CFR Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills, because SN-05 combusts noncondensable gases produced at other sources subject to Subpart BB. A copy of Subpart BB may be found in Appendix C. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304 and 40 CFR Part 60, Subpart BB]
  - a. The non-condensable gases incinerated at SN-05 shall be subjected to a minimum temperature of 1200 °F for at least 0.5 seconds. Previous tests indicate the permittee meets the required retention times. [40 CFR §60.283(a)(1)(iii) and Regulation 19, §19.804]
  - b. The permittee shall 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 system is to be certified to be accurate within ±1 percent of the temperature being measured. [40 CFR §60.284(b)(1)
- 56. The permittee shall maintain records of the combustion temperature required in Specific Condition 55.b. These records shall contain a rolling hourly average of the combustion temperature. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 57. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring CO. This CEMS shall give a readout which demonstrates compliance with the applicable limits for CO. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 58. The permittee shall perform stack testing to verify the VOC and HCl emission rates listed for SN-05 using EPA Reference Method 25A and 26A respectively. This testing shall be performed a minimum of once every five years. This testing shall be performed pursuant to Plantwide Condition 3. [Regulation 18, §18.1002, Regulation 19, §19.702, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 59. The permittee shall conduct tests to verify compliance with the  $PM/PM_{10}$  emission rates for this source a minimum of once every five years. The permittee shall use EPA Reference Method 5 and 202 to demonstrate compliance with the PM limits contained in Specific Condition 51. The permittee shall use EPA Reference Methods 201A and 202 or 5 and 202 to demonstrate compliance with the  $PM_{10}$  limits contained in Specific Condition 48. By using Method 5 and 202 for  $PM_{10}$ , the facility shall assume all collected particulate is  $PM_{10}$ . Testing shall be performed pursuant to Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 60. The permittee shall fire only the following items in the #2 Power Boiler (SN-05): noncondensable gases, 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, tire derived fuel (TDF), and petroleum coke. Plantwide Condition 14 establishes plant wide limits on the 24-hour usage of TDF. [Regulation 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 Part 70.6]
- 61. The permittee shall maintain records of fuels fired at this source, times fuel used and applicable  $SO_2$  and  $NO_x$  limits to demonstrate compliance with the fuel-specific NSPS and PSD limits. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 62. 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. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]
- 63. In lieu of the continuous opacity monitor required by 40 CFR §60.45 and 40 CFR §60.284(a)(1), the permittee shall comply with the following EPA approved monitoring plan. The Department determined and the permittee agreed that compliance with the following requirements shall 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. H2O, and
  - c. continuously monitor and record the scrubbing liquid flow rate and the pressure drop of the gas stream across the scrubber.

- 64. The permittee shall 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. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 65. The permittee shall submit report of excess emissions to the Department on a semiannual basis. All reports shall be postmarked by the 30<sup>th</sup> day of the month following the end of each semiannual period. The permittee shall submit the excess monitoring reports in accordance with General Provision 7. Excess emissions are defined as follows: [Regulation 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 shall 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 A.C.A. §8-4-203 as referenced by A.C.A.§8-4-304 and §8-4-311 and §18.1004 of Regulation 18]

## SN-06

## No. 2 Recovery Boiler

## Source 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, onsite 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" 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

66. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM<sub>10</sub> limits shall be demonstrated through compliance with Specific Condition 78. Compliance with the volatile organic compounds emission rate shall be demonstrated through compliance with Specific Condition 77. Compliance with the carbon monoxide rates shall be demonstrated through compliance with Specific Condition 71. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy    |
|-----------|-------|--------|
| $PM_{10}$ | 84.4  | 369.7  |
| VOC       | 46.7  | 204.6  |
| СО        | 980.0 | 4292.4 |

67. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM emission rates shall be demonstrated through compliance with Specific Condition 78. Compliance with the SO<sub>2</sub> emission rate shall be demonstrated through compliance with Specific Condition 72. Compliance with the NO<sub>x</sub> emission rate shall be demonstrated through compliance with Specific Condition 73. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant       | lb/hr | tpy    |
|-----------------|-------|--------|
| PM              | 84.4  | 369.7  |
| SO <sub>2</sub> | 286.0 | 1252.7 |
| NO <sub>x</sub> | 309.2 | 1354.3 |

68. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM limits shall be demonstrated through compliance with Specific Condition 78. Compliance with the HCl emission rates shall be demonstrated through compliance with Specific Condition 75. Compliance with the sulfuric acid emission rates shall be demonstrated through compliance with Specific Condition 76. Compliance with the formaldehyde, methanol and styrene emission rates has been demonstrated by previously performed emissions testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant         | lb/hr | tpy   |
|-------------------|-------|-------|
| PM                | 84.4  | 369.7 |
| Formaldehyde      | 0.72  | 3.16  |
| Hydrogen Chloride | 51.2  | 224.3 |
| Methanol          | 1.18  | 5.17  |
| Styrene           | 3.22  | 0.27  |
| Sulfuric Acid     | 0.06  | 14.1  |
| TRS               | 7.4   | 32.4  |

69. Visible emissions shall not exceed the limits specified in the following table as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 82.b.

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

70. This source is considered an affected source under 40 CFR Part 60, Subpart BB, *Standards of Performance for Kraft Pulp Mills*, because SN-06 was installed in 1989. A copy of Subpart BB may be found in Appendix C. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304, 40 CFR Part 60, Subpart A and 40 CFR Part 60, Subpart BB]

- a. The permittee shall 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)]
- b. The permittee shall not cause a discharge into the atmosphere of any gases which exhibit 35% opacity or greater. (Note: Specific Condition 69 requires a 20% opacity) [40 CFR §60.282(a)(1)(ii)]
- c. The permittee shall not cause a discharge into the atmosphere of 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)]
- d. The permittee shall 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 form SN-06. These systems shall be located downstream of the control device and the span of the continuous monitoring system shall be set as stated below. The permittee has demonstrated that the CEMS meet the span requirements and shall notify the Department before modifying either monitoring system. This CEMS shall comply with the Department's standards found in Appendix B. [40 CFR §60.284(a)(2)]
  - i. At a TRS concentration of 30 ppm for the TRS monitoring system; and
  - ii. At 25 percent oxygen for the continuous oxygen monitoring system.
- e. The permittee shall calculate and record, on a daily basis, the 12-hour average TRS concentrations for the two consecutive periods of each operating day. The permittee shall determine each 12-hour average as the arithmetic mean of the appropriate 12 continuous 1-hour average TRS concentrations provided by the CEMS. The permittee shall maintain these records on site and make them available to Department personnel upon request. [40 CFR §60.284(c)(2)]
- f. The permittee shall calculate and record, on a daily basis, the 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour TRS concentrations. The permittee shall determine each 12-hour average as the arithmetic mean of the appropriate 12 continuous 1-hour average oxygen concentrations provided by the CEMS. The permittee shall maintain these records on site and make them available to Department personnel upon request. [40 CFR §60.284(c)(2)]
- g. The permittee shall correct the 12-hour average TRS concentration to 8% oxygen using the following equation. [40 CFR §60.284(c)(3)]

$$C_{corr} = C_{meas} * [(21-X)/(21-Y)]$$

Where:

 $C_{corr}$  = the concentration corrected for oxygen  $C_{meas}$  = the concentration TRS measure by the CEM X = the volumetric oxygen concentration in percentage to be corrected to 8 percent Y = the measured 12-hour average volumetric oxygen concentration

- h. For the purpose or reports required under §60.7(c), the permittee shall report semiannually periods of excess emissions as follows: [40 CFR §60.284(d)(1)]
  - i. All 12-hour averages or TRS concentrations above 5 ppm by volume; and
  - ii. All 6-minute average opacities exceeding 35 percent.
- The permittee shall be required to report as excess emissions all 6-minute average opacities that exceed 20% ( the opacity limit required by Regulation 19). However, only those emissions which exceed 35% opacity shall be considered possible violations of Subpart BB.
- j. The Director shall 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)]
  - i. 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;
    - 1. One percent for TRS emissions from recovery furnaces
    - 2. Six percent average opacities from recovery furnaces
  - ii. 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.
- 71. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring CO emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for CO. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 72. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring SO<sub>2</sub> emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for SO<sub>2</sub>. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 73. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring  $NO_x$  emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for  $NO_x$ . The

> permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

74. The permittee shall demonstrate compliance with the HCl emission rates by the use of the CEMS for SO<sub>2</sub> and the following equations. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

$$PPMHCl = \frac{(1.28 * PPM_{SO_2})}{(1 + (PPM_{SO_2} * 0.017))}$$
$$HC_{lbs / hrl} = HCl_{PPm} * 0.0947E - 7 * DSCFH$$

- 75. The permittee shall calculate the hourly HCl emissions using the one-hour average PPM SO<sub>2</sub> values obtained from the CEMS. The permittee shall keep the records on-site and make the records available to Department personnel upon request. The permittee shall submit an annual total and each month's individual data to the Department in accordance with General Provision 7. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 76. A sulfur dioxide emission rate in excess of 250 ppm based on a three-hour average, as read by the CEMS for this pollutant, shall be considered a violation of the sulfuric acid emission rate. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 77. The permittee shall conduct stack testing to verify the VOC emission rates found in Specific Condition 66. This testing shall be conducted at least once every five years using EPA Reference Method 25A. This testing shall be conducted in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 78. The permittee shall conduct stack testing to verify the PM and PM<sub>10</sub> emission rates found in Specific Condition 66. This testing shall be conducted at least once every five years using EPA Reference Methods 5 and 202 for PM and EPA Reference Methods 201A and 202 or 5 and 202 for PM<sub>10</sub>. By using Methods 5 and 202 for PM<sub>10</sub>, the permittee shall assume all collected particulate is PM<sub>10</sub>. This testing shall be conducted in accordance with Plantwide Condition 3. [Regulation 18, §18.1002, Regulation 19, §19.702, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 52, Subpart E]
- 79. The permittee shall maintain a minimum floor tube temperature of 400°F on a 3-hour average at SN-06. This limit applies only when the boiler is firing in excess of 1.5 million pounds per day of black liquor solids. The permittee shall install, calibrate, maintain and operate a continuous monitoring device to measure and record the floor tube temperature at SN-06. This monitor shall record the temperature at least once every 15 minutes and store each hour's average in a database. The permittee shall submit semiannual reports showing the 3-hour average temperatures that are below the minimum

and the monthly average temperature. These records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703 and §19.705, 40 CFR Part 70.6, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 80. The permittee shall maintain records of the pounds per day of black liquor solids fired at SN-06 when not complying with the minimum floor tube temperature. The permittee shall update the records whenever the minimum temperature is below 400°F. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.703 and §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 81. The CO emission limits for this source are 30-day rolling averages and the NOx emission limits are 3-hour averages. Days when the unit is not operating shall not be included in the 30-day rolling average. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]
- 82. This source (SN-06) is considered an affected source under 40 CFR Part 63, Subpart MM, National Emissions Standards for Hazardous Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills. A copy of Subpart MM may be found in Appendix E. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]
  - a. 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. [40 CFR §63.862(a)(1)(i)(a)]
  - b. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of the gases discharged to the atmosphere from SN-06. The span of this system shall be set at 70 percent opacity. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [40 CFR §63.864]
  - c. 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. [40 CFR §63.864(d)(3)]
  - d. 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)]
  - e. The permittee shall implement corrective action, as specified in the startup, shutdown and malfunction plan, if the average of ten consecutive 6-minute averages results in a measurement greater than 20 percent opacity. [40 CFR §63.864(k)(1)(i)]

- f. The permittee is in violation of the standards of §63.682 when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period. [40 CFR §63.864(k)(2)(ii)]
- g. The permittee shall 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. [40 CFR §63.865]
- h. The permittee shall develop and implement a written plan as described in §63.6(e)(3) that contains the 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 contain the requirements in paragraphs (a)(1) and (2) of §63.866. [40 CFR §63.866(a)]
  - i. Procedures to determine and record the cause of an operating parameter exceedance and the time an exceedance began and ended; and
  - ii. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions to correct the exceedance.
  - iii. The startup, shutdown and malfunction plan shall also include the schedule listed in paragraphs (a)(2)(i) and (ii) of §63.866.
    - 1. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions for routine and long-term maintenance; and
    - 2. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each monitoring system is properly functioning.
- i. The permittee shall 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). [40 CFR §63.866(b)]
- j. 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 §63.866. [40 CFR §63.866(c)]
  - i. Record of the black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces;
  - ii. Records of the 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 of the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

- iii. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);
- iv. Records of monitoring parameter ranges established for each affected source or process unit and
- v. Records certifying that an NDCE recovery furnace equipped with a dry ESP was used to comply with the gaseous organic HAP standard in §63.862(c)(1).
- k. The permittee must submit the applicable notifications from Subpart A of this part, as specified in Table 1 of §63.867. [40 CFR §63.867(a)]
- 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. [40 CFR §63.867(c)]
  - i. 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.
  - ii. The permittee may combine excess emissions and/or summary reports for the mill. The permittee must submit the reports in accordance with General Provision 7.

## SN-08 No. 2 Smelt Dissolving Tank

## Source 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. Weak wash from the lime mud pressure filters and precoat washers is used as a scrubbing media at this source. 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

83. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 92 and 93. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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

84. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 94.c. [Regulation 19, §19.901 et seq., and 40 CFR Part 52, Subpart E]

| Pollutant       | lb/hr | tpy  |
|-----------------|-------|------|
| PM              | 18.0  | 78.8 |
| SO <sub>2</sub> | 10.6  | 46.4 |

85. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 88.c. [Regulation 19, §19.908, and 40 CFR Part 52, Subpart E]

| Pollutant | Emission Limit  |
|-----------|-----------------|
| TRS       | 0.0168 g/kg BLS |

86. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the ammonia emission limits shall be demonstrated through compliance with Specific Condition 91. Compliance with the methanol emission rates shall be demonstrated through compliance with Specific Condition 93. Compliance with the formaldehyde emission rates was demonstrated by stack testing performed in December 1999. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant    | lb/hr | tpy   |
|--------------|-------|-------|
| Ammonia      | 40.0  | 175.2 |
| Formaldehyde | 0.36  | 1.56  |
| Methanol     | 5.4   | 23.66 |
| TRS          | 2.1   | 9.2   |

87. Visible emissions may not exceed the limits set forth in the following table as measured by EPA Reference Method 9. [40 CFR Part 52, Subpart E]

| SN | Limit | Regulatory Citation    |
|----|-------|------------------------|
| 08 | 20%   | Regulation 19, §19.503 |

- 88. This source is subject the provisions of 40 CFR Part 60, Subpart A-General Provisions and is considered an affected source under 40 CFR Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills due to an installation date of 1989. A copy of Subpart BB may be found in Appendix C of this permit. This source is subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR 60, Subpart BB]
  - a. 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)]. [40 CFR §60.282(a)(2)]

- b. TRS emissions from this source shall 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  $H_2S$ ). [40 CFR §60.283(a)(4)]
- c. The permittee shall install, calibrate, maintain and operate a monitoring device at this source 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), Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- d. The permittee shall install, calibrate, maintain and operate a monitoring device at this source 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 the design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubbing liquid discharge point. The Administrator and the Director may be consulted for approval of alternate locations. [40 CFR §60.284(b)(2)(ii), Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- e. The permittee shall record, at least once per shift, the measurements obtained from the continuous monitoring devices installed under 40 CFR §60.284(b)(2). [40 CFR §60.284(b)(4)]
- 89. The permittee shall maintain records for the monitoring required in Specific Condition 88. These records shall be updated no later than the tenth day of the month following the month which the records represent. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 90. The permittee shall conduct testing a minimum of once every five years to verify compliance with the TRS emission rates for this source. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 91. The permittee shall conduct testing a minimum of once every five years to verify compliance with the ammonia emission rates for this source. This testing shall be performed using EPA Reference Method 206. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 92. The permittee shall conduct testing a minimum of once every five years to verify the PM emission rates for this source. This testing shall be performed using EPA Reference Methods 5 and 202. The permittee shall perform  $PM_{10}$  testing using either EPA Reference Methods 201A and 202 or 5 and 202. By using Methods 5 and 202 for  $PM_{10}$ , the permittee shall assume all collected particulate is  $PM_{10}$ . This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 19, 19.702,

Regulation 18, 18.1002, 40 CFR Part 52 Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 93. The permittee shall conduct testing a minimum of once every five years to verify compliance with the VOC emission rates for this source. This testing shall be performed using EPA Reference Method 25A. This testing shall be performed in accordance with Plantwide Condition 3. The permittee shall also 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 94.c. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 94. The No. 2 Smelt Tank Vent is considered an affected source under 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.* A copy of Subpart MM may be found in Appendix E of this permit. This source is subject, but not limited to, the following requirements. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]
  - a. 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 lb per ton (lb/ton)) of black liquor solids fired. [§63.862(a)(i)(B)]
  - b. 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 §68.3(c), as well as the procedures in (e)(10)(i) and (ii) of 40 CFR §63.864. [40 CFR §63.864(e)]
    - i. 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 within a gage pressure of  $\pm 500$  Pascals ( $\pm 2$  inches of water gage pressure); and
    - ii. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within  $\pm 5$  percent of the design scrubbing liquid flow rate.
  - c. During the initial performance test required in §63.865, the permittee established the operating ranges for the monitoring parameters in 40 CFR §63.864(e)(10). The permittee must maintain the scrubber parameters listed in the following table. Compliance shall be demonstrated through compliance with Specific Condition 94.j. [40 CFR §63.864(j)]

| SN-08 No. 2 Smelt Dissolving | Scrubber Flow          | Minimum 45 gpm                 |
|------------------------------|------------------------|--------------------------------|
| Tank Scrubber Parameters     | Scrubber Pressure Drop | Minimum 9 in. H <sub>2</sub> O |

d. 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

40 CFR §63.864(j)(1) or (2) during subsequent performance tests using the test methods in §63.865. [40 CFR §63.864(j)(3)]

- e. 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. [40 CFR §63.864(j)(4)]
- f. 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 is outside the range of values established in Specific Condition 94.c. [40 CFR \$63.864(k)]
- g. 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). [40 CFR §63.864(k)(ii)]
- h. 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 permittee must include the requirements in 40 CFR 63.866(a)(1) and (2). [40 CFR §63.866(a)]
  - i. Procedures to determine and record the cause of an operating parameter exceedance and the time an exceedance began and ended; and
  - ii. Corrective actions to be taken in the event of an operating parameter exceedance including procedures for recording the actions taken to correct the exceedance.
  - iii. The startup, shutdown and malfunction plan must also include the schedules listed in 40 CFR §63.866(a)(2)(i) and (ii):
    - 1. 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
    - 2. 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.
- The permittee must maintain records of any occurrence when corrective action is required under §63.8634(k)(1), and when a violation is noted under §63.864(k)(2). The permittee must submit records of corrective action to the Department in accordance with General Condition 7. [40 CFR §63.866(c)]
- j. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in 40 CFR §63.866(c)(1) through (7). [40 CFR §63.866(c)]
  - i. 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;

- ii. Records and documentation of supporting calculations for compliance determinations made under §63.865(a) through (d); and
- iii. Records of the monitoring parameter ranges established for each affected source or process unit.
- k. The permittee must submit the applicable notifications from Subpart A of this part as specified in Table 1 of 40 CFR §63.867. [40 CFR §63.867(a)]
- The permittee must report quarterly if measured parameters meet any of the conditions specified in 40 CFR §63.864(k)(1) or (2). 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. [40 CFR §63.867(c)]
  - i. When no exceedances of parameters have occurred, the permittee must submit a semiannual report stating that no excess emissions occurred during the reporting period.
  - ii. The permittee may combine the Subpart MM and Subpart S excess emissions and/or summary reports for the mill. This report shall be submitted in accordance with General Condition 7.

### SN-09

## No. 2 Lime Kiln

## Source 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**

95. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM<sub>10</sub> emission rates shall be demonstrated through compliance with Specific Condition 111.c. Compliance with the SO<sub>2</sub> emission rates shall be demonstrated through compliance with Specific Condition 103. Compliance with the VOC emission rates shall be demonstrated through compliance with Specific Condition 108. Compliance with the CO emission rates shall be demonstrated through compliance with Specific Condition 101 and compliance with the NO<sub>x</sub> emission rates shall be demonstrated through compliance with Specific Condition 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr | tpy   |
|------------------|-------|-------|
| PM <sub>10</sub> | 51.0  | 223.4 |
| SO <sub>2</sub>  | 16.7  | 73.2  |
| VOC              | 17.1  | 74.9  |
| СО               | 55.0  | 240.9 |
| NO <sub>x</sub>  | 68.6  | 300.5 |

96. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 100.d. [Regulation 19, §19.804 et seq., and 40 CFR Part 52, Subpart E]

| Pollutant                                  | Concentration |  |
|--|---------------|--|
| TRS  | 8 ppmv *      |  |
| *Corrected to 10% O <sub>2</sub> by volume |               |  |

97. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 111.c. [Regulation 19, §19.901 et seq., and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy   |
|-----------|-------|-------|
| PM        | 51.0  | 223.4 |

98. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission rates has been demonstrated through stack testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| 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          | 8.0   | 35.0 |

99. Visible emissions shall not exceed the limits specified in the following table as measured by Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 111.c. [40 CFR Part 52, Subpart E]

| SN | Limit | Regulatory Citation    |
|----|-------|------------------------|
| 09 | 20%   | Regulation 19, §19.503 |

100. This source is subject to the provisions of 40 CFR Part 60, Subpart A-General Provisions and is considered an affected source under 40 CFR Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills due to an installation date of 1989. A copy of Subpart

BB may be found in Appendix C of this permit. This source is subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR 60, Subpart BB]

- a. Particulate matter emissions shall not exceed 0.064 gr/dscf corrected to 10 percent oxygen when burning gaseous fossil fuels. [40 CFR 60.282(a)(3)(i)]
- b. Particulate matter emissions shall not exceed 0.13 gr/dscf corrected to 10 percent oxygen when burning liquid fossil fuel. [40 CFR 60.282(a)(3)(ii)]
- c. Total reduced sulfur emissions shall not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen. [40 CFR §60.283(a)(5) and regulation 19, §19.804]
- d. The permittee shall 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 this source. These systems shall be located downstream of the control device and the spans of these continuous monitoring systems shall be set as follows: [40 CFR §60.284(a)(2)]
  - i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
  - ii. At 25 percent oxygen for the continuous oxygen monitoring system.
- e. The permittee shall install, calibrate, maintain and operate a continuous monitoring system for the continuous measurement of the pressure loss of the gas stream by the control equipment. The manufacturer must certify the device to be accurate within a gage pressure of ±500 Pascals (ca. ±2 inches water gage pressure). [40 CFR §60.284(b)(2)(i)]
- f. The permittee shall install, calibrate, maintain and operate a continuous monitoring system for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified to be accurate to within  $\pm 15$  percent of the design liquid supply pressure. The pressure sensor or trap is to be located close to the scrubber liquid discharge point. The permittee may consult the Administrator and the Director for approval of alternate locations. [40 CFR §60.284(b)(2)(ii)]
- g. The permittee shall calculate and record, on a daily basis, the 12-hour average TRS concentrations for the two consecutive periods of the operating day. The permittee shall determine each 12-hour average as the arithmetic mean of the appropriate 12 contiguous 1-hour average TRS concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(1)]
- h. The permittee shall calculate and record, on a daily basis, the 12-hour average oxygen concentrations for the two consecutive periods of the operating day. The 12-hour averages shall correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(2)]

i. The permittee shall correct all 12-hour average TRS concentrations to 10 percent oxygen by volume using the following equation: [40 CFR §60.284(c)(3)]

 $C_{corr} = C_{meas} \times [(21 - X)/(21 - Y)]$ 

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

- j. The permittee shall record, once per eight-hour shift, the measurements obtained from the CEMS installed for liquid supply pressure and gas pressure drop. These records shall be maintained on site and made available to Department personnel upon request. [40 CFR §60.284(c)(4)]
- k. The permittee shall report semiannually periods of excess emissions from this source. Periods of excess emissions are 12-hour average TRS concentrations above 8 ppm by volume. [40 CFR §60.284(d)(2)]
- The Administrator or Director shall 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 the 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)]
- 101. The permittee shall install, calibrate, maintain and operate a CEMS for measuring CO emissions which gives a readout in pounds per hour. This CEMS shall comply with the requirements of the ADEQ CEMS condition in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 102. The lime kiln may use only pipeline quality natural gas, reprocessed fuel oil, on-site generated used fuel oil and No. 6 fuel oil as fuels. The lime kiln may also incinerate non-condensable gases as allowed by 40 CFR 60, Subpart BB. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 103. The monthly average sulfur content of the fuel oil shall not exceed 3.0% by weight.
  Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 104. The permittee shall either test each shipment of fuel oil or obtain manufacturer's certification of the sulfur content in order to demonstrate compliance with Specific Condition 103. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Condition 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

- 105. The permittee shall not use in excess of 5,400,000 gallons of fuel oil per consecutive 12month period this source (SN-09). [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 106. The permittee shall maintain records of the amount of fuel oil fired at SN-09 in order to demonstrate compliance with Specific Condition 105. These records shall be maintained on a monthly basis and updated by the 15<sup>th</sup> day of the month following the month to which they pertain. The records shall be maintained on site and made available to Department personnel upon request. Each month's individual data as well as a 12-month total shall be submitted to the Department in accordance with General Condition 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 107. The permittee shall maintain a minimum of 65% solids, based on a 30-day rolling average, in the lime mud fed to SN-09 to demonstrate compliance with the VOC emission rates. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 108. The permittee shall measure and record the solids content of the lime mud fed to SN-09 at least once per day while the kiln is in operation in order to demonstrate compliance with Specific Condition 107. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 109. The permittee shall verify compliance with the NO<sub>x</sub> emission rates through stack testing using EPA Reference Method 7E. This testing shall be performed a minimum of once per year. This testing shall be conducted according to the requirements in Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 110. The CO emission limits for this source are based on a 30-day rolling average. Days when the unit is not operating are not included in the 30-day rolling average. [Regulation 19, \$19.501 et seq. and 40 CFR Part 52, Subpart E]
- 111. This source is considered an affected source under 40 CFR Part 63, Subpart MM, National Emissions Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-alone Semichemical Pulp Mills. A copy of Subpart MM can be found in Appendix E. This source is subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]
  - a. 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 is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen. [40 CFR §63.862(a)(i)(c)]
  - b. 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 40 CFR §63.864(e)(10)(i) and (ii). [40 CFR §63.864(e)]

- i. 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 within a gage pressure of  $\pm 500$  Pascals ( $\pm 2$  inches of water gage pressure); and
- ii. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within  $\pm 5$  percent of the design scrubbing liquid flowrate.
- c. During the initial performance test, completed September 2004, required under \$63.865, the permittee established the 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. [40 CFR \$63.864(j)]

| SN-09 No. 2 Lim Kiln | Scrubber Liquor Flow                  | Minimum 1500 gal/min            |
|----------------------|---------------------------------------|---------------------------------|
|                      | Scrubber Pressure Drop ( $\Delta P$ ) | Minimum 10 in. H <sub>2</sub> O |

- d. 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. [40 CFR §63.864(j)(3)]
- e. The permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during performance test. The permittee may conduct multiple performance tests to establish a range of parameter values. [40 CFR §63.864(j)(4)]
- f. 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 is section (c) of this Specific Condition. [40 CFR §63.864(k)]
- g. 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).
- h. 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 (b), except as provided in 40 CFR §63.865(c)(1), using the following methods: [40 CFR §63.865]
  - i. 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 processes 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 40 CFR §63.866(a)(1) and (2). [40 CFR §63.866(a)]

- 1. Procedures to determine and record the cause of an operating parameter exceedance ant the time the exceedance began and ended; and
- 2. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.
- 3. The startup, shutdown and malfunction plan also must include the schedules listed in 40 CFR §63.866(a)(2)(i) and (ii):
  - a. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and longterm maintenance; and
  - b. 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.
- i. The permittee must maintain records of any occurrence when corrective action is required under 40 CFR §63.864(k)(1), and when a violation is noted under 40 CFR §63.864(k)(2). [40 CFR §63.866(b)]
- j. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in 40 CFR §63.866(c)(1) through (7): [40 CFR §63.866(c)]
  - i. Records of CaO production rates in units of Mg/d or ton/d for all lime kilns;
  - ii. Records of the 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;
  - iii. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);
  - iv. Records of monitoring parameter ranges established for each affected source or process unit.

- k. 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. [40 CFR §63.867(a)]
- The permittee must report quarterly if the measured parameters meet any of the conditions specified in 40 CFR §63.864(k)(1) or (2). 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. [40 CFR §63.867(c)]
  - i. 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.
  - ii. The permittee may combine the excess emissions and/or summary reports for Subpart S with the reports required by Subpart MM. The reports shall be submitted in accordance with General Condition 7.

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

# Source 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<sub>2</sub> and PM and low excess air (8-12%) for NO<sub>X</sub>.

# Specific Conditions

112. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by using only pipeline quality natural gas as fuel at this source. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant       | lb/hr | tpy   |
|-----------------|-------|-------|
| $PM_{10}$       | 0.6   | 2.6   |
| SO <sub>2</sub> | 0.2   | 0.9   |
| VOC             | 0.3   | 1.3   |
| СО              | 25.4  | 111.3 |
| NO <sub>x</sub> | 27.4  | 120.0 |

113. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by using only pipeline quality natural gas as fuel at this source. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy |
|-----------|-------|-----|
| PM        | 0.6   | 2.6 |

114. Visible emissions at this source shall not exceed 5% as measured by EPA Reference Method 9. Compliance shall be demonstrated by using only pipeline quality natural gas as fuel at this source. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
### SN-14

### No. 3 Recovery Boiler

### Source 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**

115. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the VOC limits shall be demonstrated through compliance with Specific Condition 127. Compliance with the CO emission limits shall be demonstrated through the use of CEMS as required in Specific Condition 123. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy    |
|-----------|-------|--------|
| VOC       | 136.0 | 600.1  |
| СО        | 856.0 | 3749.3 |

116. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the  $SO_2$  and  $NO_x$  emissions limits shall be demonstrated through the use of CEMS as required in Specific Conditions 124 and 122. Compliance with the  $PM_{10}$  emission limits shall be demonstrated through the use of a COMS as required by Specific Condition 133.b. [Regulation 19, §19.501 et seq., Regulation 19, §19.901, and 40 CFR Part 52, Subpart E]

|  | Pollutant | lb/hr | tpy |
|--|-----------|-------|-----|
|--|-----------|-------|-----|

| PM <sub>10</sub> | 93.5  | 409.5  |
|------------------|-------|--------|
| SO <sub>2</sub>  | 425.0 | 1861.5 |
| NO <sub>x</sub>  | 270.0 | 1182.6 |

 117. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the TRS emission limits shall be demonstrated through the use of CEMS as required in Specific Condition 120.e. [Regulation 19, §19.901, Regulation 19, §19.801 and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| TRS       | 6.6   | 28.9 |

118. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM emission limits shall be demonstrated through the use of COMS as required in Specific Condition 133.b. [Regulation 19, §19.901, Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy   |
|-----------|-------|-------|
| PM        | 93.5  | 409.5 |

119. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the sulfuric acid limits shall be demonstrated through compliance with Specific Condition 131. Compliance with the hydrogen chloride emission limits shall be demonstrated through the use of CEMS as required in Specific Condition 124 and the equation in Specific Condition 129. Compliance with the TRS emission limits shall be demonstrated through the use of CEMS as required in Specific Condition 120.e. Compliance with the methanol, formaldehyde, and the styrene emission limits has been demonstrated through testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant         | lb/hr | tpy    |
|-------------------|-------|--------|
| PM                | 93.5  | 409.5  |
| Formaldehyde      | 0.87  | 3.82   |
| Hydrogen Chloride | 54.5  | 238.71 |
| Methanol          | 0.46  | 2.02   |
| Styrene           | 0.07  | 0.31   |

| Sulfuric Acid | 4.2 | 18.4 |
|---------------|-----|------|
| TRS           | 6.6 | 28.9 |

- 120. This source is considered an affected source under 40 CFR Part 60, Subpart A, General Conditions and 40 CFR Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills due to an installation date in 1989. A copy of Subpart BB may be found in Appendix C. This source is subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR 60 Subpart BB]
  - a. The permittee shall not cause a discharge into the atmosphere from this source any gases which contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen. [40 CFR 60.283(a)(1)(i)]
  - b. The permittee shall not cause a discharge into the atmosphere from this source any gases which exhibit an opacity of 35% or greater. (Note: Specific Condition 121 requires opacity of 20%) [40 CFR 60.283(a)(1)(ii)]
  - c. The permittee shall 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 shall comply with the requirements of the ADEQ CEMS conditions in Appendix B. [40 CFR §60.284(a)(1) and §19.304 of Regulation 19]
  - d. Total reduced sulfur emissions shall not exceed 5 ppm by volume on a dry basis, corrected to 8 percent oxygen. [40 CFR §60.283(a)(2) and Regulation 19, §19.804]
  - e. The permittee shall 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 this source. These systems shall be located downstream of the control device and the spans of these continuous monitoring systems shall be set as follows. 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)]
    - i. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
    - ii. At 25 percent oxygen for the continuous oxygen monitoring system.
  - f. The permittee shall calculate and record, on a daily basis, the 12-hour average TRS concentrations for the two consecutive periods of the operating day. The permittee shall determine each 12-hour average as the arithmetic mean of the appropriate 12 contiguous 1-hour average TRS concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2). [40 CFR §60.284(c)(1)]
  - g. The permittee shall calculate and record, on a daily basis, the 12-hour average oxygen concentrations for the two consecutive periods of the operating day. The 12-hour averages shall correspond to the 12-hour average TRS concentrations

under 40 CFR 60.284(c)(1) and shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by the continuous monitoring system required under 40 CFR 60.284(a)(2). [40 CFR 60.284(c)(2)]

h. The permittee shall correct all 12-hour average TRS concentrations to 8 percent oxygen by volume using the following equation: [40 CFR §60.284(c)(3)]

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

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

- i. For the purpose of reports required under §60.7(c), any owner or operator subject to the provisions of this subpart shall report semiannually periods of excess emissions as follows. [40 CFR §60.284(d)(1)]
  - i. All 12-hour averages or TRS concentrations above 5 ppm by volume; and
  - 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 percent. However, only those emissions exceeding 35 percent opacity would be considered possible violations of 40 CFR Part 60, Subpart BB.
- j. The Administrator 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: [40 CFR §60.284(e)]
  - i. 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:
    - 1. One percent for TRS emissions from recovery furnaces
    - 2. Six percent average opacities from recovery furnaces
  - ii. 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.
- 121. Visible emissions may not exceed the limits specified in the following table as measured by EPA Reference Method 9. Compliance shall be demonstrated through the use of a COMS.

| SN | Limit | Regulatory Citation                                 |
|----|-------|---|
| 14 | 20%   | Regulation 19, §19.503 and 40 CFR Part52, Subpart E |

- 122. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring NO<sub>x</sub> emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for NO<sub>x</sub>. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 123. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring CO emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for CO. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 124. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system for measuring SO<sub>2</sub> emissions from this source. This CEMS shall give a readout which demonstrates compliance with the applicable limits for SO<sub>2</sub>. The permittee shall comply with the ADEQ CEMS conditions found in Appendix B. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 125. The permittee shall maintain a minimum floor tube temperature of 400 °F on a 3-hour average at SN-14. This limit applies only when the boiler is firing in excess of 1.5 million pounds per day of black liquor solids. The permittee shall install, calibrate, maintain and operate a continuous monitoring device to measure and record the floor tube temperature at SN-14. This monitor shall record the temperature at least once every 15 minutes and store each hour's average in a database. The permittee shall submit semiannual reports showing the 3-hour average temperatures that are below the minimum and the monthly average temperature. These records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703 and §19.705, 40 CFR Part 70.6, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 126. The permittee shall maintain records of the black liquor solids fired at this source when not complying with the minimum floor tube temperature of 400 °F to demonstrate whether the minimum temperature requirement is in effect. The permittee shall 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. [Regulation 19, §19.703 and §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 127. The permittee shall conduct stack testing a minimum of once every five years to verify compliance with the VOC emission limits for this source. This testing shall be performed

using EPA Reference Method 25A. This testing shall be conducted in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

- 128. The permittee shall maintain records of the pounds per day of black liquor solids fired at SN-06 when not complying with the minimum floor tube temperature. The permittee shall update the records whenever the minimum temperature is below 400°F. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.703 and §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 129. The permittee shall demonstrate compliance with the hydrogen chloride emission rates by the use of the CEMS for sulfur dioxide and the following equations. [Regulation 18, \$18.1003 and A.C.A. \$8-4-203 as referenced by A.C.A. \$8-4-304 and \$8-4-311]

 $HCl_{ppm} = (1.28 * SO_{2ppm})/(1 + (SO_{2ppm} * 0.017))$ 

HCl<sub>lb/hr</sub> = HCl<sub>ppm</sub> \* 0.0947 \* 1E-7 \* DSCFH

- 130. The permittee shall calculate the hourly HCl emissions using the one-hour average PPM SO<sub>2</sub> values obtained from the CEMS. The permittee shall keep the calculation on site and make the calculations available to Department personnel upon request. The permittee shall submit an annual total and each individual month's data in accordance with General Provision 7. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 131. A sulfur dioxide emission rate in excess of 250 ppm on a three-hour average as read by the CEMS for this pollutant shall be considered a violation of the sulfuric acid emission rate. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 132. The CO emission limits for this source are based on 30-day rolling averages while the  $SO_2$  and  $NO_x$  emission limits for this source are based on 3-hour averages. Days when the unit is not operating shall not be included in the 30-day rolling average. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]
- 133. This source is considered an affected source pursuant to 40 CFR Part 63, Subpart MM, National Emissions Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills. A copy of Subpart MM may be found in Appendix E. This source is subject, but not limited to, the following conditions: [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]
  - a. The permittee shall ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen. [40 CFR §63.862(a)(i)(A)]

- b. The permittee must install, calibrate, maintain and operate a continuous opacity monitoring system (COMS) to monitor and record the opacity of gases discharged into the atmosphere from this source. The span of this system shall be set at 70 percent opacity. [40 CFR §63.864]
- c. 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. [40 CFR §63.864(d)(3)]
- d. 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. [40 CFR §63.864(d)(4)]
- e. 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 measured opacity of greater than 20 percent. [40 CFR §63.864(k)(1)(i)]
- f. 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. [40 CFR §63.864(k)(2)(ii)]
- g. 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). This testing was performed on September 12, 2004.
- h. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains the specific procedures to be followed for operating 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 (a)(2) of 40 CFR §63.866. [40 CFR §63.866(a)]
  - i. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended, and;
  - ii. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.
  - iii. The startup, shutdown and malfunction plan must also include the schedules listed in paragraphs (a)(2)(i) and (ii) of 40 CFR §63.866:
    - 1. 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
    - 2. 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.
- i. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required is required under

63.864(k)(1), and when a violation is noted under 63.864(k)(2). The permittee shall keep these records on site and make them available to Department personnel upon request. [40 CFR 63.866(b)]

- j. In addition to the general records required by §63.10(b)(2), the owner or operator must maintain records of the information required in 40 CFR §63.866(c)(1) through (c)(7):
  - i. Records of the black liquor solids firing rates in units of Mg/d r ton/d for all recovery furnaces;
  - ii. Records of the 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;
  - iii. Records and documentation of supporting calculations for compliance determinations made under §§63.865(a) through (d);
  - iv. Records of monitoring parameter ranges established for each affected source or process unit; and
  - v. 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).
    [40 CFR §63.866(c)]
- k. The owner or operator of any affected source or process unit must submit the applicable notifications for Subpart A of this part, as specified in Table 1 of 40 CFR §63.867. [40 CFR §63.867(a)]
- The owner or operator must report quarterly if measured parameters meet any of the conditions specified in paragraphs (k)(1) or (k)(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.
  - i. 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.
  - ii. 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 shall submit these reports in accordance with General Provision 7 of this permit.
    [40 CFR §63.867(c)]

#### SN-15 No. 3 Smelt Dissolving Tank

### Source 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

134. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with the testing requirement set forth in Specific Condition 142. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 9.9   | 43.5 |

135. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM/PM<sub>10</sub> limits shall be demonstrated through compliance with Specific Condition 143.c. Compliance with the SO<sub>2</sub> limits shall be demonstrated through compliance with Specific Condition 143.c. [Regulation 19, §19.901, Regulation 19, §19.501 and 40 CFR Part 52, Subpart E]

| Pollutant        | lb/hr | tpy  |
|------------------|-------|------|
| PM               | 18.7  | 81.9 |
| PM <sub>10</sub> | 18.7  | 81.9 |
| SO <sub>2</sub>  | 5.1   | 22.3 |

136. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 139.c. [Regulation 19, §19.901, Regulation 19, §19.804 and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy |
|-----------|-------|-----|
| TRS       | 1.6   | 7.0 |

137. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the PM and methanol limits shall be demonstrated through compliance with Specific Condition 143.c. Compliance with the ammonia limits shall be demonstrated through compliance with Specific Condition 141. Compliance with the formaldehyde emission rates was demonstrated by stack testing performed February 5, 2003. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant    | lb/hr | tpy   |
|--------------|-------|-------|
| PM           | 18.7  | 81.9  |
| Ammonia      | 45.0  | 197.1 |
| Formaldehyde | 0.58  | 2.55  |
| Methanol     | 0.34  | 1.49  |
| TRS          | 1.60  | 7.00  |

- 138. Visible emissions from this source shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance shall be demonstrated through compliance with Specific Condition 143.c. [Regulation 19, 19.503 and 40 CFR Part 52, Subpart E]
- 139. This source is subject to the provisions of 40 CFR Part 60, Subpart A-General Provisions and is considered an affected source under 40 CFR Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills due to an installation date of 1989. A copy of Subpart BB may be found in Appendix C of this permit. This source is subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR 60, Subpart BB]
  - a. 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)]. Monitoring of the scrubber parameters shall demonstrate compliance with the PM limit and the monitoring required in Specific Condition 143.c. [40 CFR §60.282(a)(2)]
  - b. TRS emissions from this source shall not exceed 0.0168 g/kg measured as grams  $H_2S/kg$  black liquor solids on a 12-hour average (0.33 lb/ton black liquor solids as

 $H_2S$ ). Monitoring of the scrubber parameters and the CEMS shall demonstrate compliance with the TRS limit and the monitoring required by Specific Condition 143.e. [40 CFR §60.283(a)(4)]

- c. The permittee shall install, calibrate, maintain and operate a monitoring device at this source 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), Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- d. The permittee shall install, calibrate, maintain and operate a monitoring device at this source 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 the design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubbing liquid discharge point. The Administrator and the Director may be consulted for approval of alternate locations. [40 CFR §60.284(b)(2)(ii), Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- e. The permittee shall record, at least once per shift, the measurements obtained from the continuous monitoring devices installed under 40 CFR §60.284(b)(2). [40 CFR §60.284(c)(4)]
- 140. The permittee shall conduct testing to verify compliance with the TRS emission limits a minimum of once every five years. This testing shall be conducted using EPA Reference Method 16. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 19, §19.804]
- 141. The permittee shall conduct testing to verify compliance with the ammonia emission limits a minimum of once every five years. This testing shall be conducted using EPA Reference Method 206. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as reference by A.C.A. §8-4-304 and §8-4-311]
- 142. The permittee shall conduct testing to verify compliance with the VOC emission limits a minimum of once every five years. This testing shall be conducted using EPA Reference Method 25A. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 143. This source is considered an affected source under 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.* A copy of Subpart MM may be found in Appendix E of this permit. This source is subject, but not limited to, the following requirements. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart MM]

- a. 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 lb per ton (lb/ton)) of black liquor solids fired. [§63.862(a)(i)(B)]
- b. 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 §68.3(c), as well as the procedures in (e)(10)(i) and (ii) of 40 CFR §63.864. [40 CFR §63.864(e)]
  - i. 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 within a gage pressure of  $\pm 500$  Pascals ( $\pm 2$  inches of water gage pressure); and
  - ii. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within  $\pm 5$  percent of the design scrubbing liquid flow rate.
- c. During the initial performance test required in §63.865, the permittee established the operating ranges for the monitoring parameters in 40 CFR §63.864(e)(10). The permittee may use weak wash as the scrubbing liquor. The permittee must maintain the scrubber parameters listed in the following table. [40 CFR §63.864(j)]

| SN-15 No. 3 Smelt Dissolving | Scrubber Liquor Flow                  | Minimum 175 gpm                   |
|------------------------------|---------------------------------------|-----------------------------------|
| Tank Scrubber Parameters     | Scrubber Pressure Drop ( $\Delta P$ ) | Minimum 2.85 in. H <sub>2</sub> O |

- d. 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 40 CFR §63.864(j)(1) or (2) during subsequent performance tests using the test methods in §63.865. [40 CFR §63.864(j)(3)]
- e. 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. [40 CFR §63.864(j)(4)]
- f. 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 is outside the range of values established in Specific Condition 143.c. [40 CFR §63.864(k)]
- g. 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). [40 CFR §63.864(k)(iii)]
- h. 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 permittee must include the requirements in 40 CFR 63.866(a)(1) and (2). [40 CFR §63.866(a)]

- i. Procedures to determine and record the cause of an operating parameter exceedance and the time an exceedance began and ended; and
- ii. Corrective actions to be taken in the event of an operating parameter exceedance including procedures for recording the actions taken to correct the exceedance.
- iii. The startup, shutdown and malfunction plan must also include the schedules listed in 40 CFR §63.866(a)(2)(i) and (ii):
  - 1. 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
  - 2. 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.
- 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 in accordance with General Condition 7. [40 CFR §63.866(c)]
- j. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the information in 40 CFR §63.866(c)(1) through (7). [40 CFR §63.866(c)]
  - i. 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;
  - ii. Records and documentation of supporting calculations for compliance determinations made under §63.865(a) through (d); and
  - iii. Records of the monitoring parameter ranges established for each affected source or process unit.
- k. The permittee must submit the applicable notifications from Subpart A of this part as specified in Table 1 of 40 CFR §63.867. [40 CFR §63.867(a)]
- The permittee must report quarterly if measured parameters meet any of the conditions specified in 40 CFR §63.864(k)(1) or (2). 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. [40 CFR §63.867(c)]

- i. When no exceedances of parameters have occurred, the permittee must submit a semiannual report stating that no excess emissions occurred during the reporting period.
- m. The permittee may combine the Subpart MM and Subpart S excess emissions and/or summary reports for the mill. This report shall be submitted in accordance with General Condition 7. [40 CFR §63.867(c)(2)]

## SN-16, 17 and 18 No. 1A, 1B and 2 Bleachplant Vents

## Source 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

144. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 147. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy    |
|-----------|-------|--------|
| VOC       | 32.0  | 141.9  |
| СО        | 240.4 | 1053.0 |

145. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 146. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant        | lb/hr | tpy   |
|------------------|-------|-------|
| Chlorine         | 6.0   | 26.36 |
| Chlorine Dioxide | 4.0   | 17.58 |
| Chloroform       | 16.5  | 72.29 |

- 146. The permittee shall test SN-16, 17 and 18 a minimum of once every five years to verify compliance with the chloroform, chlorine and chlorine dioxide emission rates using the testing method found in NCASI Special Report 91-07, *Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine and Chlorine Dioxide Releases from Pulp Bleach Plants*. This testing shall be conducted in accordance with Plantwide Condition 3. The permittee shall also measure the scrubber liquid flow rate during the testing in order to establish the parameters that will be used to demonstrate compliance with the permitted emission rates. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 147. The permittee shall test SN-16, 17 and 18 a minimum of once every five years to verify compliance with the VOC and CO emission rates using EPA Reference Methods 25A and 10B respectively. This testing shall be conducted in accordance with Plantwide Condition 3. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 148. 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 Condition 149. 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]
- 149. These sources, which make up the Bleach Plant, are considered affected sources under 40 CFR Part 63, Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. A copy of Subpart S can be found in Appendix D of this permit. These sources are subject, but not limited to, the following conditions. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart S]
  - a. The permittee may use no chlorine or hypochlorite in any of the bleaching systems. [40 CFR §63.445(d)(2)]
  - b. The equipment at each bleaching stage, of the bleaching systems listed in 40 CFR §63.644(a), where chlorinated compounds are introduced shall 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 shall meet the requirements specified in Plantwide Conditions 20.0 through 20.t. [40 CFR §63.445(b)]

- c. The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in 40 CFR §63.443(c) shall:
  - i. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;
  - ii. Achieve a treatment device outlet concentration of 10 ppm or less by volume of total chlorinated HAP; or
  - iii. 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 ovendried pulp. [40 CFR63.445(c)]
- d. The permittee 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(c) and (d), except as allowed in 40 CFR §63.453(m). The CMS shall include continuous recorders for measuring the recirculation flow rate and the inlet pH of the scrubbing liquor. [40 CFR §63.453(a)]
- e. A CMS shall be operated to measure the following parameters for each gas scrubber used to comply with the bleaching requirements of 40 CFR §63.445(c).
  - i. The scrubbing liquor at all three bleaching units shall 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 shall be determined and reported as necessary.
  - ii. The permittee shall determine 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 shall maintain the amperage rates to the induced draft fans associated with the three scrubbers within the ranges listed in the following table.

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

iii. The flow rates of the scrubbers shall be maintained at the following recirculation rates or higher for the three scrubbers. [40 CFR63.445(c), Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| SN | Flow Rate (gpm) |
|----|-----------------|
|----|-----------------|

| 16 | 300 |
|----|-----|
| 17 | 300 |
| 18 | 350 |

- f. The flow of gaseous effluent into the scrubbers shall be determined indirectly by the amperage measured on the induced draft fans that blow pollutants to the Bleach Plant Scrubbers (SN-16, 17 and 18). To ensure compliance with Subpart S, the substituted parameter shall be monitored for effectiveness with the following tests and inspections. [40 CFR §63.453(a)]
  - i. An annual pressure differential test shall be performed to ensure that the Bleach Plant Scrubber fans maintain the required negative pressure across the system;
  - ii. Monthly visual inspections under the Leak Detection and Repair plan for the scrubber fans and associated process;
  - iii. Periodic preventive maintenance of the Bleach Plant Scrubber fan to ensure proper operation;
  - iv. 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
  - v. The gas scrubber liquid influent flow rate.
- g. 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 40 CFR §63.445(c)(2). [40 CFR §63.453(d)]
- h. The closed vent system must comply with the requirements in Plantwide Conditions 20.w through 20.dd and 25 and 26. [40 CFR §63.453(k)]
- i. The permittee shall set the flow indicator on each bypass line specified in 40 CFR §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. [40 CFR §63.455(e)]
- j. The permittee shall comply with the recordkeeping requirements specified in Plantwide Condition 27. [40 CFR §63.455]

### SN-20

## ERCO ClO<sub>2</sub> Generator

### Source 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

150. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 151. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant        | lb/hr | tpy   |
|------------------|-------|-------|
| Chlorine         | 0.3   | 1.32  |
| Chlorine Dioxide | 3.0   | 13.14 |

- 151. The permittee shall test this source a minimum of once every five years to verify compliance with the chlorine and chlorine dioxide emission rates using the testing method found in NCASI Special Report 91-07, *Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine and Chlorine Dioxide Releases from Pulp Bleach Plants*. This testing shall be conducted in accordance with Plantwide Condition 3. The permittee shall also monitor the temperature of the absorption water in order to determine a maximum temperature that demonstrates compliance with the emission rates found in Specific Condition 150. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 152. The permittee shall record the temperature of the absorption water once per eight-hour shift to demonstrate compliance with Specific Condition 151. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

## SN-21 Effluent Treatment Lagoons

# Source Description

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

The effluent treatment system is also used as an affected source under the clean condensate alternative (CCA) described in 40 CFR Part 63, §63.447. The treatment system includes the primary clarifiers, open trench and pre-settling ponds, as well as the aeration ponds used for biological treatment of the mill's effluent. Under CCA, the permittee offsets emissions from HVLC sources in the mill by routing pulping condensates through the hardpiped header directly beneath the surface of the aeration pond. This rerouting prevents uncontrolled emissions from the individual portions of the effluent treatment system by keeping the condensates out of open sewers where they could easily volatilize. The permittee has accepted more stringent condensate collection and treatment requirements in order to comply with the clean condensate alternative under 40 CFR 63, Subpart S.

# Specific Conditions

153. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 159 and 182. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 12.8  | 55.7 |

154. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 155.a. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant    | lb/hr | tpy  |
|--------------|-------|------|
| Chloroform   | 6.8   | 29.6 |
| Formaldehyde | 0.46  | 2.02 |
| Methanol     | 5.5   | 24.0 |

155. 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*. A copy of Subpart S may be found in Appendix D of this permit. [Regulation 19, §19.304 and 40 CFR §63.446(a)]

- a. The permittee shall conduct daily monitoring of the site-specific parameters established according to the procedures specified in 40 CFR §63.453(n) and perform the following monitoring procedures: [40 CFR §63.453(j)(2)]
  - i. On a daily basis, the permittee shall monitor the outlet COD from the first aeration pond. If the COD exceeds 634 mg/l, the permittee shall 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 horsepower-hours fall below 11,600 hp-hr, the permittee shall implement the procedures listed in 40 CFR §63.453(p);
  - iii. Inlet liquid flow; and
  - iv. Liquid temperature.
- b. The permittee shall 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 40 CFR §63.453(j) and (j)(2)(ii) and the compliance percent reduction tests specified in 40 CFR §63.453(j)(p)(1)(i). The permittee shall perform the following procedures with the liquid samples:
  - i. Perform the percent reduction test procedures specified in 40 CFR §63.457(1) 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 shall be at least as great as the total HAP reduction specified in 40 CFR §63.446(e)(2).
    - 2. The remaining quarterly percent reduction test shall 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 first quarter test specified in 40 CFR §63.453(j)(2)(ii)(A).
- c. The parameter values used to calculate the percent reductions required in 40 CFR §63.453(j)(2)(ii)(A) and (B) shall be the parameter values measured and the samples taken under 40 CFR §63.453(j)(1) of this section.
- d. Each owner or operator of a biological treatment system complying with 40 CFR §63.453(j) shall meet all of the following requirements when the monitoring parameters specified in 40 CFR §63.453(j)(1)(i) through (iii) are below the minimum operating parameter values or above the maximum operating parameter values established in 40 CFR §63.453(n). [40 CFR §63.453(p)]
  - i. The following shall occur and be recorded as soon as practical:
    - 1. determine compliance with 40 CFR §63.446(e)(2) using the percent reduction test procedures specified in 40 CFR §63.457(l) and the monitoring data specified in 40 CFR §63.453(j)(1) that coincide with the time period of the parameter excursion;
    - 2. Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period; and

- 3. Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.
- e. A parameter excursion is not a violation of the applicable emission standard if the percent reduction test specified in 40 CFR §63.453(p)(1)(i) demonstrates compliance with 40 CFR63.446(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.
- f. The permittee shall perform an initial performance test (IPT) within 180 days of permit issuance in order to determine compliance with the clean condensate alternative. The level of over-collecting required to demonstrate compliance with the clean condensate alternative by offsetting the HVLC emissions shall be established by the IPT and shall be no less than 14.4 lb/odtp. Compliance with the collection requirements under 40 CFR §63.446 and §63.447 shall be demonstrated by the new combined collection limit, at an appropriate averaging period. [40 CFR §63.453(a)]

#### 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

156. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with the methanol emission rates set forth in Specific Condition 159. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy   |
|-----------|-------|-------|
| VOC       | 59.2  | 259.1 |

157. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with the acetone and methanol emission rates through compliance with Specific Condition 159. Compliance with the formaldehyde emission rates has been demonstrated through previous testing. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant    | lb/hr | tpy   |
|--------------|-------|-------|
| Acetone      | 8.8   | 38.6  |
| Formaldehyde | 0.2   | 0.88  |
| Methanol     | 59.0  | 258.2 |

- 158. The methanol concentration in the shower water at this source shall not exceed 300 ppm and the acetone concentration shall not exceed 200 ppm. Compliance shall be demonstrated through compliance with Specific Condition 159. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 159. The permittee shall test the shower water at this source at least once per year to obtain the methanol and acetone concentrations using EPA Reference Method 25D or NCASI Method DI/MEOH-94-02, *Methanol in Processed Liquids by GC/FID*, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. These records shall be maintained on site and made available to Department personnel upon request. If the test

results exceed the limits established in Specific Condition 156, the permittee must test for that pollutant on a weekly basis for a minimum of ten consecutive weeks. Once ten consecutive tests give passing results, the permittee may resume annual testing. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

## SN-23, 24, 25, 26, and 28 Storage Tanks

# 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

160. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 163 and 167. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| SN | Pollutant | lb/hr | tpy |
|----|-----------|-------|-----|
| 23 | VOC       | 1.0   | 4.0 |
| 28 | VOC       | 0.2   | 0.9 |

161. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 163 and 166. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| SN | Pollutant       | lb/hr | tpy  |
|----|-----------------|-------|------|
| 23 | Methanol        | 0.91  | 4.0  |
| 24 | Ammonia         | 0.1   | 0.1  |
| 25 | Phosphoric Acid | 0.01  | 0.1  |
| 26 | Sulfuric Acid   | 0.1   | 0.44 |

162. SN-23 is considered an affected source under 40 CFR Part 60, Subpart A, General Provisions and 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. A copy of Subpart Kb may be found in Appendix G. This source is subject, but not limited to, the following condition. [Regulation 19, 19.304 and 40 CFR Part 60, Subpart Kb]

- a. The permittee shall keep readily accessible records showing the dimensions of this storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR §60.116b(b)]
- b. 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(d)]
- 163. The permittee shall store only methanol in SN-23. The methanol throughput at this source shall not exceed 18,850,000 pounds per consecutive twelve month period. The permittee shall maintain records of the methanol throughput at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 164. The permittee shall store only ammonia in SN-24. The ammonia throughput at this source shall not exceed 800,000 pounds per consecutive twelve month period. The permittee shall maintain records of the ammonia throughput at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 165. The permittee shall store only nutrient solutions containing phosphoric acid in SN-25. The phosphoric acid throughput at this source shall not exceed 1.5 million pounds per consecutive twelve month period. The permittee shall maintain records of the phosphoric acid throughput at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 166. The permittee shall store only sulfuric acid in SN-26. The sulfuric acid throughput at this source shall not exceed 105,102,000 pounds per consecutive twelve month period. The permittee shall maintain records of the sulfuric acid throughput at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be

maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

167. The permittee shall store only formic acid in SN-28. The formic acid throughput at this source shall not exceed 5,336,000 pounds per consecutive twelve month period. The permittee shall maintain records of the formic acid throughput at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

#### SN-29

### **Recausticizer Vents**

#### Source 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

168. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 170. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 3.0   | 12.8 |

169. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 170. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant    | lb/hr | tpy   |
|--------------|-------|-------|
| Acetaldehyde | 0.51  | 2.24  |
| Ammonia      | 18.0  | 78.8  |
| Methanol     | 2.4   | 10.52 |

- 170. The permittee shall not process more than 420,500 tons of lime at this source per consecutive twelve month period. Compliance shall be demonstrated through compliance with Specific Condition 171. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 171. The permittee shall maintain records of the amount of lime processed at this source. These records shall be maintained on a monthly basis and updated by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of

these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

# SN-30A through F PCC Carbonators

# Source 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<sub>2</sub> 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

172. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 174 and 175. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| SN            | Pollutant       | lb/hr |
|---------------|-----------------|-------|
|               | $PM_{10}$       | 4.8   |
|               | SO <sub>2</sub> | 2.4   |
| 30A through F | VOC             | 12.6  |
|               | СО              | 54.6  |
|               | NO <sub>x</sub> | 65.4  |

173. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with

Specific Conditions 174 and 175. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| SN            | Pollutant | lb/hr |
|---------------|-----------|-------|
| 30A through F | PM        | 4.8   |
|               | TRS       | 0.36  |

174. The permittee shall test at least two of the PCC carbonators a minimum of once every five years for the pollutants listed below using the indicated test methods. The Department reserves the right to determine which of the PCC carbonators to test. [Regulation 19, §19.702, Regulation 18, §18.1002, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant       | EPA Reference Method |  |
|-----------------|----------------------|--|
| SO <sub>2</sub> | 6C                   |  |
| VOC             | 25A                  |  |
| NO <sub>x</sub> | 7E                   |  |
| СО              | 10B                  |  |

175. The permittee shall test at least two of the PCC carbonators at least once every five years for particulate matter using EPA Reference Methods 5 and 202. The  $PM_{10}$  test shall use either EPA Reference Methods 201A and 202 or 5 and 202. By using Methods 5 and 202 the facility shall assume all collected particulate matter is  $PM_{10}$ . [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

#### SN-36 Weak Black Liquor Tanks

## Source 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

176. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 179. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 7.3   | 32.0 |

177. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 179. [Regulation 19, §19.901, Regulation 18, §18.801, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy |
|-----------|-------|-----|
| TRS       | 0.1   | 0.5 |

178. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 179. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Methanol  | 6.3   | 27.6 |

179. The temperature at this source shall not exceed 203 °F. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the temperature at this source. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 18, §18.1003, Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

## SN-37

### Pulp Dryer

### Source 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

180. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 182. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 4.7   | 20.5 |

181. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 182. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant    | lb/hr | tpy  |
|--------------|-------|------|
| Acetaldehyde | 0.7   | 3.1  |
| Methanol     | 2.6   | 11.4 |

182. The VOC concentration in the white water at this source shall not exceed 20 ppm. The permittee shall test the white water using EPA Reference Method 25D a minimum of once per year in order to verify compliance with the 20 ppm VOC limit. The permittee shall maintain records of the results of the white water testing. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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

### Source 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

183. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 184. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy   |
|-----------|-------|-------|
| VOC       | 123.0 | 540.0 |

184. The permittee shall not process more than 4,320,000 tons of wood chips per consecutive twelve month period. The permittee shall maintain records of the amount of wood chips processed at the wood yard on a monthly basis and these records shall be updated no later than the 15<sup>th</sup> day of the month following the month to which the records pertain. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

# SN-40 No. 1A and 1B Digester Chip Fill Exhaust

# Source 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

185. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 188. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 10.0  | 44.0 |

186. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 188. [Regulation 18, §18.801, Regulation 19, §19.901, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Methanol  | 5.75  | 25.1 |
| TRS       | 2.02  | 8.8  |

187. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 188. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Methanol  | 5.75  | 25.1 |

188. The spacing of the digester blows shall not fall below 25 minutes. Blowing the digesters in less than 25 minute intervals, shall be considered a violation of the emission rates for this source. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

189. The permittee shall maintain records of the spacing of the digester blows. These records shall be maintained on a monthly basis and updated not later than the 15<sup>th</sup> day of the month following the month to which the records pertain. These records shall be maintained on site and made available to department personnel upon request. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
#### SN-41

### Sludge Landfill

#### Source 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

190. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 192. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 11.6  | 51.0 |

191. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 192. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Methanol  | 0.28  | 1.23 |

- 192. The permittee shall not place in excess of 344,000 cubic yards (163,000 tons) of sludge in the landfill during any consecutive twelve-month period. [Regulation 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 Part 70.6]
- 193. The permittee shall maintain records of the amount of sludge placed in the landfill. These records shall be maintained on a quarterly basis. The permittee may use the records required by the Solid Waste Division of the Department to fulfill this record keeping requirement. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

#### SN-42

#### No. 2 Decker

#### Source 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

194. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 197. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 5.6   | 24.5 |

195. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 197. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Acetone   | 7.5   | 32.9 |
| Methanol  | 3.3   | 10.1 |

- 196. The methanol concentration in the shower water at this source shall not exceed 300 ppm and the acetone concentration shall not exceed 200 ppm. Compliance shall be demonstrated through compliance with Specific Condition 197. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 197. The permittee shall test the shower water at this source at least once per year to obtain the methanol and acetone concentrations using EPA Reference Method 25D or NCASI Method DI/MEOH-94-02, *Methanol in Processed Liquids by GC/FID*, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. These records shall be maintained on site and made available to Department personnel upon request. If the test results exceed the limits established in Specific Condition XX, the permittee must test for that pollutant on a weekly basis for a minimum ten consecutive weeks. Once ten consecutive tests give passing results, the permittee may resume annual testing. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

#### SN-43

#### Tub Grinder

#### Source 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

198. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 201. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant       | lb/hr | tpy  |
|-----------------|-------|------|
| $PM_{10}$       | 0.9   | 2.9  |
| SO <sub>2</sub> | 1.1   | 4.8  |
| VOC             | 0.5   | 1.6  |
| СО              | 8.0   | 25.8 |
| NO <sub>x</sub> | 12.0  | 38.7 |

199. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 201. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy |
|-----------|-------|-----|
| РМ        | 0.9   | 2.9 |

- 200. The permittee shall use only No. 2 fuel oil to fire the tub grinder's engine. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 201. The permittee shall not use in excess of 258,000 gallons of no. 2 fuel oil at the tub grinder during any consecutive twelve month period. The permittee shall maintain records of the amount of No. 2 fuel oil used at the tub grinder. These records shall be maintained on a monthly basis and updated by the 15<sup>th</sup> day of the month following the month to which the records pertain. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 52, Subpart

E, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

#### SN-44a through 44d Paper Machines

#### Source 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

202. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 205. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| SN              | Pollutant | Fan #              | lb/hr per fan | lb/hr total | tpy  |
|-----------------|-----------|--------------------|---------------|-------------|------|
|                 |           | 1                  | 0.7           |             |      |
| 44a             | VOC       | 2                  | 0.6           | 2.0         | 8.8  |
| <del>44</del> a | VUC       | 3,4                | 0.4           | 2.0         | 0.0  |
|                 |           | 5                  | 0.3           |             |      |
|                 |           | 1, 2, 3, 8         | 0.7           |             |      |
| 44b             | VOC       | 4                  | 0.6           | 4.7         | 20.6 |
| 440             | voc       | 5                  | 0.5           | 4.7         | 20.0 |
|                 |           | 6, 7               | 0.4           |             |      |
|                 |           | 1, 2, 3, 4         | 0.7           |             |      |
| 44c             | VOC       | 5, 6, 7            | 0.6           | 5.6         | 24.6 |
|                 |           | 8,9                | 0.5           |             |      |
|                 |           | 1, 2               | 0.8           |             |      |
|                 |           | 3                  | 0.7           |             |      |
| 44d             | VOC       | 4, 5               | 0.5           | 6.8         | 29.8 |
| <del>44</del> u | 440 000   | 6, 7, 8, 9         | 0.4           | 0.0         | 29.0 |
|                 |           | 10, 11, 12         | 0.3           |             |      |
|                 |           | 13, 14, 15, 16, 17 | 0.2           |             |      |

203. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 207. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| SN  | Pollutant | Fan #  | lb/hr per fan                          | lb/hr total | tpy  |
|-----|-----------|--|--|-------------|------|
| 44a | Methanol  | 1<br>2<br>3, 4<br>5  | 0.7<br>0.6<br>0.4<br>0.3               | 2.0         | 8.8  |
| 44b | Methanol  | 1, 2, 3, 8<br>4<br>5<br>6, 7   | 0.7<br>0.6<br>0.5<br>0.4               | 4.7         | 20.6 |
| 44c | Methanol  | 1, 2, 3, 4<br>5, 6, 7<br>8, 9  | 0.7<br>0.6<br>0.5                      | 5.6         | 24.6 |
| 44d | Methanol  | 1, 2<br>3<br>4, 5<br>6, 7, 8, 9<br>10, 11, 12<br>13, 14, 15,<br>16, 17 | 0.8<br>0.7<br>0.5<br>0.4<br>0.3<br>0.2 | 6.8         | 29.8 |

- 204. The VOC concentration in the shower water at SN-44a shall not exceed 20 ppm. Compliance shall be demonstrated through compliance with Specific Condition 205. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 205. The permittee shall test the shower water at SN-44a at least once per year to obtain the VOC concentration using EPA Reference Method 25D. The permittee shall maintain records of these test results. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703 and §19.705, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 206. The methanol concentration in the shower water at SN-44b, 44c, and 44d shall not exceed 20 ppm. Compliance shall be demonstrated through compliance with Specific Condition 207. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

207. The permittee shall test the shower water at SN-44b, 44c, and 44d at least once per year to obtain the methanol concentration using EPA Reference Method 25A or NCASI Method DI/MEOH-94-02, *Methanol in Processed Liquids by GC/FID*, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. The permittee shall keep records of these test results. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 18, §18.1003 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

#### SN-45 Oxygen Delignification System

### Source 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

208. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 210. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| VOC       | 9.1   | 39.9 |
| СО        | 16.5  | 72.3 |

209. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with the VOC emission rates listed above. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

| Pollutant | lb/hr | tpy  |
|-----------|-------|------|
| Methanol  | 9.1   | 39.9 |

210. The permittee shall conduct testing to verify compliance with the VOC and CO emission rates for this source. This testing shall be performed using EPA Reference Method 25D and EPA Reference Method 10 respectively. This testing shall be performed in accordance with Plantwide Condition 3. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

## SECTION V: COMPLIANCE PLAN AND SCHEDULE

Domtar Industries Inc. - 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: PLANTWIDE CONDITIONS

- The permittee shall 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 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §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 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 set forth 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 shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 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 19, §19.702 and/or Regulation 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 shall maintain the equipment in good condition at all times. [Regulation 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 26 and A.C.A. §8-4-203 as referenced by A.C.A. §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 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 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 ozonedepleting 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.

## 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 shall not exceed 220 tons for all three boilers. The permittee shall maintain records of the amount of TDF used in the three Power Boilers. These records shall be maintained on a daily basis. These records shall be kept on site and made available to Department personnel upon request. The permittee shall submit a copy of the annual total and each day's individual data in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 52, Subpart E, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

## **Testing Conditions**

- 15. 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 shall resume the testing schedule outlined 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. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 16. 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 shall resume the testing schedule outlined 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. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 17. The permittee shall maintain records of the operation of the sources referenced in Plant Wide Conditions 15 and 16 to demonstrate that testing is not required. The permittee shall keep these records on-site and provide the records to Department personnel upon request. The permittee shall submit the records to the Department in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 18. For those sources using both a portable analyzer and an independent third party, the permittee shall use the 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 shall perform future tests using an independent third party and not the portable analyzer. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]
- 19. The permittee may submit one excess emissions report (EER) for those sources where an NSPS and/or the Department's CEMS standards requires the permittee to submit an EER. The EER must contain all information required by the applicable NSPS subpart and the Department's CEMS standards. [Regulation 19, §19.304 and §19.705 and 40 CFR Part 60]

### Standards for the Pulping System at Kraft Processes - Low Volume High Concentration Sources

- 20. 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 19, §19.304 and 40 CFR Part 63, Subpart S]
  - a. The permittee shall 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. [40 CFR §63.443(a)(1)(i)]
  - b. 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. [40 CFR §63.443(c)]
  - c. 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. [40 CFR §63.443(d)(4)]
  - d. 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: [40 CFR §63.443(e)(1) through (e)(4)]

- i. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and
- ii. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
- iii. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and the HVLC systems.
- e. 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): [40 CFR §63.446(b)]
  - i. Each digester system;
  - ii. Each turpentine recovery system;
  - iii. Each evaporator system condensate from:
  - iv. The vapors from each stage where weak liquor is introduced (feed stages); and
  - v. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).
  - vi. Each HVLC collection system; and
  - vii. Each LVHC collection system.
- f. 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): [40 CFR §63.446(c)]
  - i. All pulping process condensates from the equipment systems specified 40 CFR §§63.446(b)(1) through (b)(5).
  - ii. 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).
  - iii. 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.
- g. 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). [40 CFR §63.446(d)]

- h. 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).
- i. 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:
  - 1. Covers, water seals, and other air emission control equipment as specified in paragraph (b) of this section.
  - 2. Hard-piping.
  - 3. Venting of the individual drain system through a closed vent system to a control device in accordance with the following requirements:
    - a. 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
    - b. 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.
  - ii. 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:
    - 1. 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.
    - 2. Drain control requirements. Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:
      - a. When a water seal is used, the water seal shall be designed such that either:
      - b. The outlet to the pipe discharging the regulated-material extends below the liquid surface in the water seal of the drain; or

- i. 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.
- ii. When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving regulatedmaterial), 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.
- j. 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: [40 CFR §63.446(d)(2)]
  - i. 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
  - ii. 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.
- k. The permittee will treat the pulping system condensate listed in Plant Wide Condition 20e 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. [40 CFR §63.446(e)]
- 1. 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).
- m. 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).

- n. 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.
- o. 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). [40 CFR §63.450(a)]
- p. 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. [40 CFR §63.450(b)]
- q. 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). [40 CFR §63.450(c)]
- r. 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 s and t. [40 CFR §63.450(d)]
- s. 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. [40 CFR §63.450(d)(1)]
- t. 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. [40 CFR §63.450(d)(2)]
- u. 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.) [40 CFR §63.453(a)]

- v. 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. [40 CFR §63.453(k)(1)]
- w. 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. [40 CFR §63.453(k)(2)]
- x. 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). [40 CFR §63.453(k)(3)]
- y. The permittee shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in §63.457(e). [40 CFR §63.453(k)(4)]
- z. 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. [40 CFR §63.453(k)(5)]
- aa. 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. [40 CFR §63.453(k)(6)]
  - i. 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.
  - ii. The repair or corrective action shall be completed no later than fifteen calendar days after the problem is identified.
- bb. 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. [40 CFR §63.453(m)]
- cc. 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:

- i. During the initial performance test required in §63.457(a) or any subsequent performance test, continuously record the operating parameter.
- ii. 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.
- iii. 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
- iv. 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. [40 CFR §63.453(n)(1) through (n)(4)]
- dd. 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)]

Clean Condensate Alternative Requirements

- 21. The permittee shall install and operate a clean condensate alternative technology with a continuous monitoring system to reduce total HAP emissions by reducing uncontrolled HAP emissions from the effluent treatment system to the levels indicated in Specific Condition 153f. [Regulation 19, §19.304 and 40 CFR §63.447(b)]
- 22. The permittee shall install, calibrate, maintain and operate a CMS to monitor the total amount of methanol entering the effluent treatment system through the hardpiping header for pulping condensate listed under Plantwide Condition 20.i.2. [Regulation 19, §19.304 and 40 CFR §63.453(a)]
- 23. The permittee shall install, calibrate, operate and maintain a CMS to monitor the shower water quality to the HVLC sources within the facility covered under 40 CFR §63.443(a)(1)(ii) through §63.443(a)(1)(v) to ensure the methanol concentration in these streams does not increase beyond the ranges of normal operating variability. The CMS shall include lockout indicators or blanks that prevent foul condensates from entering the HVLC shower water systems. [Regulation 19, §19.304 and 40 CFR §63.453(a) and §63.453(m)]

24. The permittee shall incorporate the CMS monitoring equipment for the clean condensate alternative into the record keeping required under Plantwide Conditions 25 through 27 for LVHC systems to ensure compliance with the more stringent condensate collection and treatment requirements. Regulation 19, §19.304 and 40 CFR §63.453(a) and §63.453(m)]

### **Recordkeeping Requirements**

- 25. 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. [Regulation 19, §19.304 and 40 CFR §63.454(a)]
- 26. 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
  - 1. 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)]
- 27. 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. [Regulation 19, §19.304 and 40 CFR §63.454(d)]

### **Test Methods and Procedures**

- 28. 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). [Regulation 19, §19.304 and §19.702 and 40 CFR §63.457(a)]
- 29. 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. [Regulation 19, §19.503(B)(1)]
- MACT Rules with Future Compliance Dates
- 30. Before March 7, 2007, 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. [Regulation 26, §26.1011(A)(1)]
- 31. 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 shall submit a permit modification within 180 days of the effective date of this standard to incorporate the changes. [Regulation 19, §19.304 and 40 CFR §63, Subpart S]

Permit Shield

32. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated December 1, 2003.

| Source No. | Regulation | Description  |
|------------|------------|--|
| Facility   | 18         | Arkansas Air Code  |
| Facility   | 19         | SIP  |
| Facility   | 26         | Regulations of the Arkansas<br>Operating Air Permit Program<br>(Title V) |

#### **Applicable Regulations**

| Source No. | Regulation                 | Description                     |
|------------|----------------------------|---------------------------------|
| Facility   | A.C.A. 8-4-101 et seq.     | Arkansas Water and Air          |
| 2          | 1                          | Pollution Control Act           |
| Facility   | 40 CFR Part 63, Subpart S  | NESHAPS for Hazardous Air       |
| 2          |                            | 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                |
| 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                   |

| Source No. | Regulation                 | Description                     |
|------------|----------------------------|---------------------------------|
| 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                |
| 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.

# Inapplicable Regulations

| Affected Source | Regulatory<br>Citation        | Description of<br>Regulation   | Basis for Determination  |
|-----------------|-------------------------------|--|--|
| 1               | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | This boiler is not an electric<br>utility steam-generating unit. |

| 1 | 40 CFR                        | Standards of   | This boiler does not have a  |
|---|-------------------------------|--|--|
|   | §60.46b(h)(2)                 | Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | federally enforceable provision<br>that limits it to an annual capacity<br>factor of 10% or less.                  |
| 1 | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Heat input exceeds 100<br>MMBTU/hr.  |
| 3 | 40 CFR Part 60,<br>Subpart D  | Standards of<br>Performance for<br>Fossil-Fuel-Fired<br>Steam Generators for<br>Which Construction<br>Commenced after<br>August 17, 1971   | Boiler was constructed before effective date.  |
| 3 | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | This boiler is not an electric<br>utility steam-generating unit and<br>constructed prior to the effective<br>date. |
| 3 | 40 CFR Part 60,<br>Subpart Db | Standards of<br>Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | Boiler constructed prior to the effective date.  |
| 3 | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr and<br>constructed prior to the effective<br>date.            |
| 5 | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | This boiler is not an electric<br>utility steam-generating unit and<br>constructed prior to the effective<br>date. |

| 5  | 40 CFR Part 60,<br>Subpart Db | Standards of<br>Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | Boiler constructed prior to the effective date.   |
|----|-------------------------------|--|---|
| 5  | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr and<br>constructed prior to the effective<br>date. |
| 6  | 40 CFR Part 60,<br>Subpart D  | Standards of<br>Performance for<br>Fossil-Fuel-Fired<br>Steam Generators for<br>Which Construction<br>Commenced after<br>August 17, 1971   | This boiler is not fired with fossil fuel.  |
| 6  | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | This boiler is not an electric<br>utility steam generating unit.  |
| 6  | 40 CFR Part 60,<br>Subpart Db | Standards of<br>Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | Boiler constructed prior to the effective date.   |
| 6  | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr and<br>constructed prior to the effective<br>date. |
| 11 | 40 CFR Part 60,<br>Subpart D  | Standards of<br>Performance for<br>Fossil-Fuel-Fired<br>Steam Generators for<br>Which Construction<br>Commenced after<br>August 17, 1971   | Boiler's heat input capacity is less<br>than 250 MMBTU/hr.  |

| 11 | 10 CED Dowt 60                | Standarda of   | Roilar is not an alastria utility   |
|----|-------------------------------|--|---|
| 11 | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | Boiler is not an electric utility steam generating unit.  |
| 11 | 40 CFR Part 60,<br>Subpart Db | Standards of<br>Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | Boiler constructed before the effective date.   |
| 11 | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr and<br>constructed before the effective<br>date. |
| 12 | 40 CFR Part 60,<br>Subpart D  | Standards of<br>Performance for<br>Fossil-Fuel-Fired<br>Steam Generators for<br>Which Construction<br>Commenced after<br>August 17, 1971   | Boiler's heat input capacity is less<br>than 250 MMBTU/hr.  |
| 12 | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | Boiler is not an electric utility steam generating unit.  |
| 12 | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr.   |
| 14 | 40 CFR Part 60,<br>Subpart D  | Standards of<br>Performance for<br>Fossil-Fuel-Fired<br>Steam Generators for<br>Which Construction<br>Commenced after<br>August 17, 1971   | Boiler is not fired with fossil fuel.   |

| 14     | 40 CFR Part 60,<br>Subpart Da | Standards of<br>Performance for<br>Electric Utility Steam<br>Generators for Which<br>Construction<br>Commenced after<br>September 18, 1978 | Boiler is not an electric utility<br>steam generating unit.                                      |
|--------|-------------------------------|--|--|
| 14     | 40 CFR Part 60,<br>Subpart Db | Standards of<br>Performance for<br>Industrial-Commercial<br>Steam Generating<br>Units  | Boiler does not burn fossil fuels<br>and is not in SIC 28.                                       |
| 14     | 40 CFR Part 60,<br>Subpart Dc | Standards of<br>Performance for Small<br>Industrial-<br>Commercial-<br>Institutional Steam<br>Generating Units                             | Boiler's heat input capacity<br>exceeds 100 MMBTU/hr.  |
| 16     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Bleachplants are not included in<br>the affected facilities for this<br>subpart.                 |
| 17     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Bleachplants are not included in<br>the affected facilities for this<br>subpart.                 |
| 18     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Bleachplants are not included in<br>the affected facilities for this<br>subpart.                 |
| 19     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Chlorine dioxide generators are<br>not included in the affected<br>facilities for this subpart.  |
| 20     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Chlorine dioxide generators are<br>not included in the affected<br>facilities for this subpart.  |
| 21     | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Wastewater treatment systems<br>are not included in the affected<br>facilities for this subpart. |
| 22(1A) | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Constructed prior to the effective date of this subpart.   |

| 23 | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978 | Methanol is not a petroleum<br>liquid and source was constructed<br>after 1978.    |
|----|-------------------------------|--|--|
| 23 | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984 | Methanol is not a petroleum<br>liquid and source was constructed<br>after 1984.    |
| 23 | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills  | Methanol tanks are not included<br>in the affected facilities for this<br>subpart. |
| 28 | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978 | Formic acid is not a petroleum<br>liquid and source was constructed<br>after 1978. |
| 28 | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984 | Formic Acid is not a petroleum<br>liquid and source was constructed<br>after 1984. |

| 28           | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for | Tank's volume is less than 40 m3<br>and the liquid vapor pressure is |
|--------------|-------------------------------|---------------------------------|--|
|              |                               | Storage Vessels for             | less than 3.5 KPa.   |
|              |                               | Volatile Organic                |  |
|              |                               | Liquid Storage                  |  |
|              |                               | Vessels (Including              |  |
|              |                               | Petroleum Liquid                |  |
|              |                               | Storage Vessels) for            |  |
|              |                               | Which Construction,             |  |
|              |                               | Reconstruction, or              |  |
|              |                               | Modification                    |  |
|              |                               | Commenced after July            |  |
|              |                               | 23, 1984                        |  |
| 29           | 40 CFR Part 60,               | Standards of                    | Recausticizer vents are not  |
| _/           | Subpart BB                    | Performance for Kraft           | included in the affected sources                                     |
|              | Subpart BB                    | Pulp Mills                      | of this subpart.   |
| 30           | 40 CFR Part 60,               | Standards of                    | Carbonators are not included in                                      |
| 50           | Subpart BB                    | Performance for Kraft           | the affected sources of this   |
|              | Subpart BB                    | Pulp Mills                      | subpart.   |
| 31           | 40 CFR Part 60,               | Standards of                    | Carbonators are not included in                                      |
| 51           | Subpart BB                    | Performance for Kraft           | the affected sources of this   |
|              | Subpart DD                    | Pulp Mills                      | subpart.   |
| 32           | 40 CFR Part 60,               | Standards of                    | Carbonators are not included in                                      |
| 32           | Subpart BB                    | Performance for Kraft           | the affected sources of this   |
|              | Subpart DD                    | Pulp Mills                      | subpart.   |
| 33           | 40 CFR Part 60,               | Standards of                    | Carbonators are not included in                                      |
| 55           | Subpart BB                    | Performance for Kraft           | the affected sources of this   |
|              | Subpart DD                    | Pulp Mills                      |  |
| PCC Plant    | 40 CFR Part 60,               | Standards of                    | subpart.<br>The PCC plant does not crush or                          |
| PCC Plant    |                               | Performance for                 | <b>1</b>   |
|              | Subpart OOO                   | Nonmetallic Mineral             | grind nonmetallic minerals.  |
|              |                               |                                 |  |
| Turnantina   | 40 CED Dowt 60                | Processing Plants               | Turmentine is not a petroloum  |
| Turpentine   | 40 CFR Part 60,               | Standards of<br>Performance for | Turpentine is not a petroleum  |
| Storage Tank | Subpart K                     |                                 | liquid and source was constructed                                    |
|              |                               | Storage Vessels for             | after 1978.  |
|              |                               | Petroleum Liquids for           |  |
|              |                               | Which Construction,             |  |
|              |                               | Reconstruction, or              |  |
|              |                               | Modification                    |  |
|              |                               | Commenced after                 |  |
|              |                               | June 11, 1973, and              |  |
|              |                               | Prior to May 19, 1978           |  |

| Turpentine<br>Storage Tank | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Turpentine is not a petroleum<br>liquid and the tank's capacity is<br>less than 40,000 gallons. |
|----------------------------|-------------------------------|---|---|
| Turpentine<br>Storage Tank | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Source was constructed prior to effective date.   |
| Turpentine<br>Storage Tank | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or a non-<br>attainment area.                 |
| Turpentine<br>Decanter     | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Turpentine is not a petroleum<br>liquid and source was constructed<br>after 1978.               |

| Turpentine<br>Decanter  | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Turpentine is not a petroleum<br>liquid and the tank's capacity is<br>less than 40,000 gallons. |
|-------------------------|-------------------------------|---|---|
| Turpentine<br>Decanter  | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Source was constructed prior to effective date.   |
| Turpentine<br>Decanter  | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or a non-<br>attainment area.                 |
| #6 Fuel Oil Day<br>Tank | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Source constructed after 1978.  |

| #6 Fuel Oil Day<br>Tank      | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Tank constructed after 1984.  |
|------------------------------|-------------------------------|---|---|
| #6 Fuel Oil Day<br>Tank      | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Capacity of tank is less than 40 m3.  |
| #6 Fuel Oil Day<br>Tank      | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or a non-<br>attainment area. |
| #6 Fuel Oil<br>Storage Tanks | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | These tanks constructed after 1978.   |

| #6 Fuel Oil     | 40 CFR Part 60, | Standards of                       | These tanks constructed after    |
|-----------------|-----------------|------------------------------------|----------------------------------|
| Storage Tanks   | Subpart Ka      | Performance for                    | 1984.                            |
| Storage Taiks   | Subpart Ka      | Storage Vessels for                | 1704.                            |
|                 |                 | Petroleum Liquids for              |                                  |
|                 |                 | Which Construction,                |                                  |
|                 |                 |                                    |                                  |
|                 |                 | Reconstruction, or<br>Modification |                                  |
|                 |                 | Commenced after                    |                                  |
|                 |                 |                                    |                                  |
|                 |                 | May 18, 1978, and                  |                                  |
| #CE 101         |                 | Prior to July 23, 1984             |                                  |
| #6 Fuel Oil     | 40 CFR Part 60, | Standards of                       | Capacity of tank is less than 40 |
| Storage Tanks   | Subpart Kb      | Performance for                    | m3.                              |
|                 |                 | Storage Vessels for                |                                  |
|                 |                 | Volatile Organic                   |                                  |
|                 |                 | Liquid Storage                     |                                  |
|                 |                 | Vessels (Including                 |                                  |
|                 |                 | Petroleum Liquid                   |                                  |
|                 |                 | Storage Vessels) for               |                                  |
|                 |                 | Which Construction,                |                                  |
|                 |                 | Reconstruction, or                 |                                  |
|                 |                 | Modification                       |                                  |
|                 |                 | Commenced after July               |                                  |
|                 |                 | 23, 1984                           |                                  |
| #6 Fuel Oil     | §19.10          | Regulations for the                | This facility is not located in  |
| Storage Tanks   |                 | Control of Volatile                | Pulaski County or a non-         |
|                 |                 | Organic Compounds                  | attainment area.                 |
|                 |                 | in Pulaski County                  |                                  |
| Pulp mill Pitch | 40 CFR Part 60, | Standards of                       | Source constructed after 1978.   |
| Dispersant Tank | Subpart K       | Performance for                    |                                  |
|                 |                 | Storage Vessels for                |                                  |
|                 |                 | Petroleum Liquids for              |                                  |
|                 |                 | Which Construction,                |                                  |
|                 |                 | Reconstruction, or                 |                                  |
|                 |                 | Modification                       |                                  |
|                 |                 | Commenced after                    |                                  |
|                 |                 | June 11, 1973, and                 |                                  |
|                 |                 | Prior to May 19, 1978              |                                  |

| Pulp mill Pitch<br>Dispersant Tank | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Source was constructed after 1984.  |
|------------------------------------|-------------------------------|---|---|
| Pulp mill Pitch<br>Dispersant Tank | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Capacity of tank is less than 40 m3.  |
| Pulp mill Pitch<br>Dispersant Tank | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or a non-<br>attainment area. |
| Pulp mill<br>Defoamer Tanks        | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Tanks were constructed after 1978.  |

| Pulpmill        | 40 CFR Part 60, | Standards of                      | Tanks were constructed after              |
|-----------------|-----------------|-----------------------------------|---|
| Defoamer Tanks  | Subpart Ka      | Performance for                   | 1984.                                     |
| Derounier Tunks | Suopurt Itu     | Storage Vessels for               | 1701.                                     |
|                 |                 | Petroleum Liquids for             |   |
|                 |                 | Which Construction,               |   |
|                 |                 |                                   |   |
|                 |                 | Reconstruction, or                |   |
|                 |                 | Modification                      |   |
|                 |                 | Commenced after                   |   |
|                 |                 | May 18, 1978, and                 |   |
|                 |                 | Prior to July 23, 1984            |   |
| Pulp mill       | 40 CFR Part 60, | Standards of                      | Capacity of tank is less than 40          |
| Defoamer Tanks  | Subpart Kb      | Performance for                   | m3.                                       |
|                 |                 | Storage Vessels for               |   |
|                 |                 | Volatile Organic                  |   |
|                 |                 | Liquid Storage                    |   |
|                 |                 | Vessels (Including                |   |
|                 |                 | Petroleum Liquid                  |   |
|                 |                 | Storage Vessels) for              |   |
|                 |                 | Which Construction,               |   |
|                 |                 | Reconstruction, or                |   |
|                 |                 | Modification                      |   |
|                 |                 | Commenced after July              |   |
|                 |                 | 23, 1984                          |   |
| Pulp mill       | §19.10          | Regulations for the               | This facility is not located in           |
| Defoamer Tanks  | \$17.10         | Control of Volatile               | Pulaski County or a non-                  |
| Derodiner Tanks |                 | Organic Compounds                 | attainment area.                          |
|                 |                 | •                                 | attainment area.                          |
| 44              | 40 CFR Part 60, | in Pulaski County<br>Standards of | Paper machines are not included           |
| 44              |                 |                                   | -   |
|                 | Subpart BB      | Performance for Kraft             | in the subpart's affected sources.        |
|                 | 40 CED David CO | Pulp Mills                        | To also see a second second second second |
| 62 Paper        | 40 CFR Part 60, | Standards of                      | Tanks were constructed after              |
| machine         | Subpart Ka      | Performance for                   | 1984 and have capacities less             |
| Lubricating and |                 | Storage Vessels for               | than 40,000 gallons.                      |
| Hydraulic Oil   |                 | Petroleum Liquids for             |   |
| Tanks           |                 | Which Construction,               |   |
|                 |                 | Reconstruction, or                |   |
|                 |                 | Modification                      |   |
|                 |                 | Commenced after                   |   |
|                 |                 | May 18, 1978, and                 |   |
|                 |                 | Prior to July 23, 1984            |   |

| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Capacity of tank is less than 40 m3.   |
|--|-------------------------------|---|--|
| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area. |
| 61 Paper<br>machine<br>Calendar Stack<br>Reservoirs              | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Tanks were constructed after 1978.   |
| 61 Paper<br>machine<br>Calendar Stack<br>Reservoirs              | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Tanks were constructed after 1984.   |
| 61 Paper<br>machine<br>Calendar Stack<br>Reservoirs              | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or    | Capacity of tank is less than 40 m3.   |
|--|-------------------------------|--|--|
|  |                               | Modification<br>Commenced after July<br>23, 1984   |  |
| 61 Paper<br>machine<br>Calendar Stack<br>Reservoirs              | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County   | This facility is not located in<br>Pulaski County or in a non-<br>attainment area.     |
| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978 | Tanks have capacities less than 40,000 gallons.  |
| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984 | Tanks were constructed before<br>1978 and have capacities less<br>than 40,000 gallons. |

| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Sources were constructed prior to effective date.                                     |
|--|-------------------------------|---|---|
| 62 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area.    |
| 63 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Tanks were constructed after<br>1978 and have capacities less<br>than 40,000 gallons. |
| 63 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Tanks have capacities less than 40,000 gallons.                                       |

| 63 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Sources constructed prior to<br>effective date.                                       |
|--|-------------------------------|---|---|
| 63 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area.    |
| 64 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Tanks were constructed after<br>1978 and have capacities less<br>than 40,000 gallons. |
| 64 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Tanks were constructed after<br>1984 and have capacities less<br>than 40,000 gallons. |

| 64 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Capacity of tank is less than 40 m3.   |
|--|-------------------------------|---|--|
| 64 Paper<br>machine<br>Lubricating and<br>Hydraulic Oil<br>Tanks | §19.10                        | Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area.   |
| Paper machine<br>Retention Aid<br>Tanks                          | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978  | Retention aid is not a petroleum<br>liquid and tanks were constructed<br>after 1978. |
| Paper machine<br>Retention Aid<br>Tanks                          | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984  | Retention Aid is not a petroleum liquid.   |

| Paper machine  | 40 CFR Part 60, | Standards of           | Capacity of tank is less than 40 |
|----------------|-----------------|------------------------|----------------------------------|
| Retention Aid  | Subpart Kb      | Performance for        | m3.                              |
| Tanks          | Subpurt Ro      | Storage Vessels for    |                                  |
| 1 difks        |                 | Volatile Organic       |                                  |
|                |                 | Liquid Storage         |                                  |
|                |                 |                        |                                  |
|                |                 | Vessels (Including     |                                  |
|                |                 | Petroleum Liquid       |                                  |
|                |                 | Storage Vessels) for   |                                  |
|                |                 | Which Construction,    |                                  |
|                |                 | Reconstruction, or     |                                  |
|                |                 | Modification           |                                  |
|                |                 | Commenced after July   |                                  |
|                |                 | 23, 1984               |                                  |
| Paper machine  | §19.10          | Regulations for the    | This facility is not located in  |
| Retention Aid  |                 | Control of Volatile    | Pulaski County or in a non-      |
| Tanks          |                 | Organic Compounds      | attainment area.                 |
|                |                 | in Pulaski County      |                                  |
| Zinc Chloride  | 40 CFR Part 60, | Standards of           | Zinc Chloride is not a petroleum |
| Storage Tank   | Subpart K       | Performance for        | liquid or a volatile organic     |
|                |                 | Storage Vessels for    | compound.                        |
|                |                 | Petroleum Liquids for  |                                  |
|                |                 | Which Construction,    |                                  |
|                |                 | Reconstruction, or     |                                  |
|                |                 | Modification           |                                  |
|                |                 | Commenced after        |                                  |
|                |                 | June 11, 1973, and     |                                  |
|                |                 | Prior to May 19, 1978  |                                  |
| Zinc Chloride  | 40 CFR Part 60, | Standards of           | Zinc Chloride is not a petroleum |
| Storage Tank   | Subpart Ka      | Performance for        | liquid or a volatile organic     |
| - totage funit | - separt in     | Storage Vessels for    | compound.                        |
|                |                 | Petroleum Liquids for  | -ompound.                        |
|                |                 | Which Construction,    |                                  |
|                |                 | Reconstruction, or     |                                  |
|                |                 | Modification           |                                  |
|                |                 | Commenced after        |                                  |
|                |                 |                        |                                  |
|                |                 | May 18, 1978, and      |                                  |
|                |                 | Prior to July 23, 1984 |                                  |

| 40 CFR Part 60  | Standards of   | Zinc Chloride is not a petroleum   |
|-----------------|--|--|
| ,               |  | liquid or a volatile organic   |
|                 |  | compound.  |
|                 | 0  | compound.  |
|                 | Ū.   |  |
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|                 | _  |  |
|                 | -  |  |
|                 |  |  |
|                 | Reconstruction, or   |  |
|                 | Modification   |  |
|                 | Commenced after July   |  |
|                 | 23, 1984   |  |
| §19.10          | Regulations for the  | This facility is not located in  |
| -               | Control of Volatile  | Pulaski County or in a non-  |
|                 | Organic Compounds  | attainment area.   |
|                 | 0 1  |  |
| 40 CFR Part 60. | · · · · · ·  | Tanks were constructed after   |
| ,               |  | 1978 and have capacities less  |
| o we puit in    |  | than 40,000 gallons.   |
|                 | -  | unan 10,000 ganons.  |
|                 | -  |  |
|                 | · · · · · · · · · · · · · · · · · · ·  |  |
|                 |  |  |
|                 |  |  |
|                 |  |  |
|                 |  |  |
|                 |  |  |
|                 |  | Tanks capacities are less than   |
| Subpart Ka      |  | 40,000 gallons.  |
|                 | -  |  |
|                 | -  |  |
|                 | Which Construction,  |  |
|                 | Reconstruction, or   |  |
|                 | Modification   |  |
|                 | Commenced after  |  |
|                 |  |  |
|                 | May 18, 1978, and  |  |
|                 | 40 CFR Part 60,<br>Subpart Kb<br>§19.10<br>40 CFR Part 60,<br>Subpart K<br>40 CFR Part 60,<br>Subpart Ka | Subpart KbPerformance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction, or<br>Modification<br>Commenced after July<br>23, 1984§19.10Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County40 CFR Part 60,<br>Subpart KStandards of<br>Petroleum Liquids for<br>Which Construction, or<br>Modification<br>Commenced after<br> |

| Pulp dryer      | 40 CFR Part 60, | Standards of           | Tanks were constructed prior to    |
|-----------------|-----------------|------------------------|------------------------------------|
| Lubricating and | Subpart Kb      | Performance for        | the effective date of the subpart. |
| Hydraulic Units | Suspan no       | Storage Vessels for    | ale effective date of the suspart. |
|                 |                 | Volatile Organic       |                                    |
|                 |                 | Liquid Storage         |                                    |
|                 |                 | Vessels (Including     |                                    |
|                 |                 | Petroleum Liquid       |                                    |
|                 |                 | Storage Vessels) for   |                                    |
|                 |                 | Which Construction,    |                                    |
|                 |                 | Reconstruction, or     |                                    |
|                 |                 | Modification           |                                    |
|                 |                 | Commenced after July   |                                    |
|                 |                 | 23, 1984               |                                    |
| Woodyard        | 40 CFR Part 60, | Standards of           | Source was constructed after       |
| Diesel Tank     | Subpart K       | Performance for        | 1978 and capacity is less than     |
|                 | 2 woput 11      | Storage Vessels for    | 40,000 gallons.                    |
|                 |                 | Petroleum Liquids for  |                                    |
|                 |                 | Which Construction,    |                                    |
|                 |                 | Reconstruction, or     |                                    |
|                 |                 | Modification           |                                    |
|                 |                 | Commenced after        |                                    |
|                 |                 | June 11, 1973, and     |                                    |
|                 |                 | Prior to May 19, 1978  |                                    |
| Woodyard        | 40 CFR Part 60, | Standards of           | Source was constructed after       |
| Diesel Tank     | Subpart Ka      | Performance for        | 1984 and capacity is less than     |
|                 | 1               | Storage Vessels for    | 40,000 gallons.                    |
|                 |                 | Petroleum Liquids for  | , ,                                |
|                 |                 | Which Construction,    |                                    |
|                 |                 | Reconstruction, or     |                                    |
|                 |                 | Modification           |                                    |
|                 |                 | Commenced after        |                                    |
|                 |                 | May 18, 1978, and      |                                    |
|                 |                 | Prior to July 23, 1984 |                                    |

| Woodyard      | 40 CFR Part 60, | Standards of                      | Capacity of tank is less than 40 |
|---------------|-----------------|-----------------------------------|----------------------------------|
| Diesel Tank   | Subpart Kb      | Performance for                   | m3.                              |
| 210001 10000  | Swepart IIC     | Storage Vessels for               |                                  |
|               |                 | Volatile Organic                  |                                  |
|               |                 | Liquid Storage                    |                                  |
|               |                 | Vessels (Including                |                                  |
|               |                 | Petroleum Liquid                  |                                  |
|               |                 | Storage Vessels) for              |                                  |
|               |                 | Which Construction,               |                                  |
|               |                 | Reconstruction, or                |                                  |
|               |                 | Modification                      |                                  |
|               |                 | Commenced after July              |                                  |
|               |                 |                                   |                                  |
| Woodyard      | §19.10          | 23, 1984<br>Regulations for the   | This facility is not located in  |
| Diesel Tank   | §19.10          | Control of Volatile               | Pulaski County or in a non-      |
| Diesei Talik  |                 |                                   | attainment area.                 |
|               |                 | Organic Compounds                 | attainment area.                 |
| Casalina Daam | 40 CED Dout 60  | in Pulaski County<br>Standards of | Source man endetre defter        |
| Gasoline Room | 40 CFR Part 60, |                                   | Source was constructed after     |
| Storage Tank  | Subpart K       | Performance for                   | 1978.                            |
|               |                 | Storage Vessels for               |                                  |
|               |                 | Petroleum Liquids for             |                                  |
|               |                 | Which Construction,               |                                  |
|               |                 | Reconstruction, or                |                                  |
|               |                 | Modification                      |                                  |
|               |                 | Commenced after                   |                                  |
|               |                 | June 11, 1973, and                |                                  |
|               |                 | Prior to May 19, 1978             |                                  |
| Gasoline Room | 40 CFR Part 60, | Standards of                      | Constructed after 1984 and       |
| Storage Tank  | Subpart Ka      | Performance for                   | capacity is less than 40,000     |
|               |                 | Storage Vessels for               | gallons.                         |
|               |                 | Petroleum Liquids for             |                                  |
|               |                 | Which Construction,               |                                  |
|               |                 | Reconstruction, or                |                                  |
|               |                 | Modification                      |                                  |
|               |                 | Commenced after                   |                                  |
|               |                 | May 18, 1978, and                 |                                  |
|               |                 | Prior to July 23, 1984            |                                  |

| Gasoline Room    | 40 CFR Part 60, | Standards of           | Capacity of tank is less than 40   |
|------------------|-----------------|------------------------|------------------------------------|
| Storage Tank     |                 | Performance for        | m3.                                |
| Storage Tallk    | Subpart Kb      |                        | 1113.                              |
|                  |                 | Storage Vessels for    |                                    |
|                  |                 | Volatile Organic       |                                    |
|                  |                 | Liquid Storage         |                                    |
|                  |                 | Vessels (Including     |                                    |
|                  |                 | Petroleum Liquid       |                                    |
|                  |                 | Storage Vessels) for   |                                    |
|                  |                 | Which Construction,    |                                    |
|                  |                 | Reconstruction, or     |                                    |
|                  |                 | Modification           |                                    |
|                  |                 | Commenced after July   |                                    |
|                  |                 | 23, 1984               |                                    |
| Gasoline Room    | §19.10          | Regulations for the    | This facility is not located in    |
| Storage Tank     |                 | Control of Volatile    | Pulaski County or in a non-        |
|                  |                 | Organic Compounds      | attainment area.                   |
|                  |                 | in Pulaski County      |                                    |
| Wastewater       | 40 CFR Part 60, | Standards of           | Nutrient is not a petroleum liquid |
| Nutrient Storage | Subpart K       | Performance for        | or a volatile organic compound.    |
| Tanks            | -               | Storage Vessels for    |                                    |
|                  |                 | Petroleum Liquids for  |                                    |
|                  |                 | Which Construction,    |                                    |
|                  |                 | Reconstruction, or     |                                    |
|                  |                 | Modification           |                                    |
|                  |                 | Commenced after        |                                    |
|                  |                 | June 11, 1973, and     |                                    |
|                  |                 | Prior to May 19, 1978  |                                    |
| Wastewater       | 40 CFR Part 60, | Standards of           | Nutrient is not a petroleum liquid |
| Nutrient Storage | Subpart Ka      | Performance for        | or a volatile organic compound.    |
| Tanks            | Subpartina      | Storage Vessels for    | or a volume organic compound.      |
|                  |                 | Petroleum Liquids for  |                                    |
|                  |                 | Which Construction,    |                                    |
|                  |                 | Reconstruction, or     |                                    |
|                  |                 | Modification           |                                    |
|                  |                 | Commenced after        |                                    |
|                  |                 |                        |                                    |
|                  |                 | May 18, 1978, and      |                                    |
|                  |                 | Prior to July 23, 1984 |                                    |

| Wastewater            | 40 CFR Part 60, | Standards of           | Nutrient is not a petroleum liquid |
|-----------------------|-----------------|------------------------|------------------------------------|
| Nutrient Storage      | Subpart Kb      | Performance for        | or a volatile organic compound.    |
| Tanks                 | Subpart Ko      | Storage Vessels for    | or a volatile organic compound.    |
| 1 анкъ                |                 | Volatile Organic       |                                    |
|                       |                 | e                      |                                    |
|                       |                 | Liquid Storage         |                                    |
|                       |                 | Vessels (Including     |                                    |
|                       |                 | Petroleum Liquid       |                                    |
|                       |                 | Storage Vessels) for   |                                    |
|                       |                 | Which Construction,    |                                    |
|                       |                 | Reconstruction, or     |                                    |
|                       |                 | Modification           |                                    |
|                       |                 | Commenced after July   |                                    |
|                       |                 | 23, 1984               |                                    |
| Wastewater            | §19.10          | Regulations for the    | This facility is not located in    |
| Nutrient Storage      |                 | Control of Volatile    | Pulaski County or in a non-        |
| Tanks                 |                 | Organic Compounds      | attainment area.                   |
|                       |                 | in Pulaski County      |                                    |
| Sodium                | 40 CFR Part 60, | Standards of           | §19.10                             |
| Hypochlorite          | Subpart K       | Performance for        |                                    |
| Tanks                 |                 | Storage Vessels for    |                                    |
|                       |                 | Petroleum Liquids for  |                                    |
|                       |                 | Which Construction,    |                                    |
|                       |                 | Reconstruction, or     |                                    |
|                       |                 | Modification           |                                    |
|                       |                 | Commenced after        |                                    |
|                       |                 | June 11, 1973, and     |                                    |
|                       |                 | Prior to May 19, 1978  |                                    |
| Sodium                | 40 CFR Part 60, | Standards of           | Sodium hypochlorite is not a       |
|                       | · · · ·         | Performance for        | • •                                |
| Hypochlorite<br>Tanks | Subpart Ka      |                        | petroleum liquid or a volatile     |
| 1 allKS               |                 | Storage Vessels for    | organic compound.                  |
|                       |                 | Petroleum Liquids for  |                                    |
|                       |                 | Which Construction,    |                                    |
|                       |                 | Reconstruction, or     |                                    |
|                       |                 | Modification           |                                    |
|                       |                 | Commenced after        |                                    |
|                       |                 | May 18, 1978, and      |                                    |
|                       |                 | Prior to July 23, 1984 |                                    |

| Sodium       | 40 CFR Part 60, | Standards of           | Sodium hypochlorite is not a   |
|--------------|-----------------|------------------------|--------------------------------|
| Hypochlorite | Subpart Kb      | Performance for        | petroleum liquid or a volatile |
| Tanks        | 1               | Storage Vessels for    | organic compound.              |
|              |                 | Volatile Organic       | State I and                    |
|              |                 | Liquid Storage         |                                |
|              |                 | Vessels (Including     |                                |
|              |                 | Petroleum Liquid       |                                |
|              |                 | Storage Vessels) for   |                                |
|              |                 | Which Construction,    |                                |
|              |                 | Reconstruction, or     |                                |
|              |                 | Modification           |                                |
|              |                 | Commenced after July   |                                |
|              |                 | 23, 1984               |                                |
| Sodium       | 40 CFR Part 60, | Standards of           | Sodium hydrosulfide is not a   |
| Hydrosulfide | Subpart K       | Performance for        | petroleum liquid or a volatile |
| Storage Tank |                 | Storage Vessels for    | organic compound.              |
|              |                 | Petroleum Liquids for  |                                |
|              |                 | Which Construction,    |                                |
|              |                 | Reconstruction, or     |                                |
|              |                 | Modification           |                                |
|              |                 | Commenced after        |                                |
|              |                 | June 11, 1973, and     |                                |
|              |                 | Prior to May 19, 1978  |                                |
| Sodium       | 40 CFR Part 60, | Standards of           | Sodium hydrosulfide is not a   |
| Hydrosulfide | Subpart Ka      | Performance for        | petroleum liquid or a volatile |
| Storage Tank |                 | Storage Vessels for    | organic compound.              |
|              |                 | Petroleum Liquids for  |                                |
|              |                 | Which Construction,    |                                |
|              |                 | Reconstruction, or     |                                |
|              |                 | Modification           |                                |
|              |                 | Commenced after        |                                |
|              |                 | May 18, 1978, and      |                                |
|              |                 | Prior to July 23, 1984 |                                |

| Sodium       | 40 CFR Part 60,                         | Standards of           | Sodium hydrosulfide is not a      |
|--------------|---|------------------------|-----------------------------------|
| Hydrosulfide | Subpart Kb                              | Performance for        | petroleum liquid or a volatile    |
| Storage Tank | ~ ~ ~ F ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | Storage Vessels for    | organic compound.                 |
|              |   | Volatile Organic       | organic compound.                 |
|              |   | Liquid Storage         |                                   |
|              |   | Vessels (Including     |                                   |
|              |   | Petroleum Liquid       |                                   |
|              |   | Storage Vessels) for   |                                   |
|              |   | Which Construction,    |                                   |
|              |   | Reconstruction, or     |                                   |
|              |   | Modification           |                                   |
|              |   | Commenced after July   |                                   |
|              |   | 23, 1984               |                                   |
| Sodium       | §19.10                                  | Regulations for the    | This facility is not located in   |
| Hydrosulfide | 0                                       | Control of Volatile    | Pulaski County or in a non-       |
| Storage Tank |   | Organic Compounds      | attainment area.                  |
| e            |   | in Pulaski County      |                                   |
| Powerhouse   | 40 CFR Part 60,                         | Standards of           | Tank capacity is less than 40,000 |
| Defoamer     | Subpart K                               | Performance for        | gallons.                          |
| Storage Tank | -                                       | Storage Vessels for    |                                   |
|              |   | Petroleum Liquids for  |                                   |
|              |   | Which Construction,    |                                   |
|              |   | Reconstruction, or     |                                   |
|              |   | Modification           |                                   |
|              |   | Commenced after        |                                   |
|              |   | June 11, 1973, and     |                                   |
|              |   | Prior to May 19, 1978  |                                   |
| Powerhouse   | 40 CFR Part 60,                         | Standards of           | Source was constructed prior to   |
| Defoamer     | Subpart Ka                              | Performance for        | 1978.                             |
| Storage Tank | -                                       | Storage Vessels for    |                                   |
| _            |   | Petroleum Liquids for  |                                   |
|              |   | Which Construction,    |                                   |
|              |   | Reconstruction, or     |                                   |
|              |   | Modification           |                                   |
|              |   | Commenced after        |                                   |
|              |   | May 18, 1978, and      |                                   |
|              |   | Prior to July 23, 1984 |                                   |

| Powerhouse                             | 40 CFR Part 60, | Standards of           | Source was constructed prior to   |
|--|-----------------|------------------------|-----------------------------------|
| Defoamer                               | Subpart Kb      | Performance for        | effective date.                   |
| Storage Tank                           | o we pair ite   | Storage Vessels for    |                                   |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                 | Volatile Organic       |                                   |
|  |                 | Liquid Storage         |                                   |
|  |                 | Vessels (Including     |                                   |
|  |                 | Petroleum Liquid       |                                   |
|  |                 | Storage Vessels) for   |                                   |
|  |                 | Which Construction,    |                                   |
|  |                 | Reconstruction, or     |                                   |
|  |                 | Modification           |                                   |
|  |                 | Commenced after July   |                                   |
|  |                 | 23, 1984               |                                   |
| Powerhouse                             | §19.10          | Regulations for the    | This facility is not located in   |
| Defoamer                               | 819.10          | Control of Volatile    | Pulaski County or in a non-       |
|  |                 |                        | attainment area.                  |
| Storage Tank                           |                 | Organic Compounds      | attainment area.                  |
|  | 40 CED David (0 | in Pulaski County      | Common and an effect              |
| 62 Fluorescent                         | 40 CFR Part 60, | Standards of           | Source was constructed after      |
| Dye Storage                            | Subpart K       | Performance for        | 1978.                             |
| Tank                                   |                 | Storage Vessels for    |                                   |
|  |                 | Petroleum Liquids for  |                                   |
|  |                 | Which Construction,    |                                   |
|  |                 | Reconstruction, or     |                                   |
|  |                 | Modification           |                                   |
|  |                 | Commenced after        |                                   |
|  |                 | June 11, 1973, and     |                                   |
|  |                 | Prior to May 19, 1978  |                                   |
| 62 Fluorescent                         | 40 CFR Part 60, | Standards of           | Tank capacity is less than 40,000 |
| Dye Storage                            | Subpart Ka      | Performance for        | gallons.                          |
| Tank                                   |                 | Storage Vessels for    |                                   |
|  |                 | Petroleum Liquids for  |                                   |
|  |                 | Which Construction,    |                                   |
|  |                 | Reconstruction, or     |                                   |
|  |                 | Modification           |                                   |
|  |                 | Commenced after        |                                   |
|  |                 | May 18, 1978, and      |                                   |
|  |                 | Prior to July 23, 1984 |                                   |

| Dye Storage<br>TankControl of Volatile<br>Organic Compounds<br>in Pulaski CountyPulaski County or in a non-<br>attainment area.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commence dafter<br>June 11, 1973, and<br>Prior to May 19, 1978Source was constructed after<br>1978.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Petroleum Liquids for<br>Which Construction, or<br>Modification<br>Commence dafter<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.63 Fluorescent<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commence dafter<br>Modification<br>Commenced after<br>Much Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons. | 62 Fluorescent<br>Dye Storage<br>Tank | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July<br>23, 1984 | Source was constructed prior to<br>effective date. |
|---|---------------------------------------|-------------------------------|---|--|
| TankOrganic Compounds<br>in Pulaski Countyattainment area.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Source was constructed after<br>1978.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Petroleum Liquids for<br>Which Construction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.63 Fluorescent<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>My 18, 1978, andTank capacity is less than 40,000<br>gallons.   | 62 Fluorescent                        | §19.10                        | Regulations for the   | This facility is not located in                    |
| in Pulaski County63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Source was constructed after<br>1978.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Petroleum Liquids for<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.   | •                                     |                               |   | •  |
| 63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Source was constructed after<br>1978.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Petroleum Liquids for<br>Which Construction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.  | 1 ank                                 |                               | 0 1   | allainment area.                                   |
| Dye Storage<br>TankSubpart KPerformance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 19781978.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.  | 63 Fluorescent                        | 40 CFR Part 60                |   | Source was constructed after                       |
| TankStorage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 197863 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Tank capacity is less than 40,000<br>gallons.  |                                       | ,                             |   |  |
| Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Petroleum Liquids for<br>Tank63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.   | • •                                   |                               |   |  |
| Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Reconstruction, or<br>Modification<br>Tank capacity is less than 40,000<br>gallons.63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.  |                                       |                               | e   |  |
| Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 197863 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.   |                                       |                               | Which Construction,   |  |
| Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978Commenced after<br>June 11, 1973, and<br>Prior to May 19, 197863 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.   |                                       |                               | Reconstruction, or  |  |
| June 11, 1973, and<br>Prior to May 19, 197863 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.  |                                       |                               |   |  |
| Prior to May 19, 197863 Fluorescent<br>Dye Storage40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.  |                                       |                               |   |  |
| 63 Fluorescent<br>Dye Storage<br>Tank40 CFR Part 60,<br>Subpart KaStandards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, andTank capacity is less than 40,000<br>gallons.   |                                       |                               |   |  |
| Dye Storage<br>Tank<br>Subpart Ka<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and   |                                       |                               |   |  |
| TankStorage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and   |                                       | ,                             |   | 1 V  |
| Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and  | •                                     | Subpart Ka                    |   | gallons.   |
| Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and   | Tank                                  |                               | -   |  |
| Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and  |                                       |                               | ·   |  |
| Modification<br>Commenced after<br>May 18, 1978, and  |                                       |                               |   |  |
| Commenced after<br>May 18, 1978, and  |                                       |                               |   |  |
| May 18, 1978, and   |                                       |                               |   |  |
|   |                                       |                               |   |  |
|   |                                       |                               | Prior to July 23, 1984  |  |

| 63 Fluorescent<br>Dye Storage<br>Tank | 40 CFR Part 60,<br>Subpart Kb | Standards of<br>Performance for<br>Storage Vessels for<br>Volatile Organic<br>Liquid Storage<br>Vessels (Including<br>Petroleum Liquid<br>Storage Vessels) for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after July | Source was constructed prior to effective date.                                    |
|---------------------------------------|-------------------------------|---|--|
| 63 Fluorescent<br>Dye Storage<br>Tank | \$19.10                       | 23, 1984<br>Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area. |
| Liquid Dye<br>Storage Tanks           | 40 CFR Part 60,<br>Subpart K  | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>June 11, 1973, and<br>Prior to May 19, 1978                                      | Dye tanks do not contain<br>petroleum liquids or volatile<br>organic compounds.    |
| Liquid Dye<br>Storage Tanks           | 40 CFR Part 60,<br>Subpart Ka | Standards of<br>Performance for<br>Storage Vessels for<br>Petroleum Liquids for<br>Which Construction,<br>Reconstruction, or<br>Modification<br>Commenced after<br>May 18, 1978, and<br>Prior to July 23, 1984                                      | Dye tanks do not contain<br>petroleum liquids or volatile<br>organic compounds.    |

| Liquid Dye    | 40 CFR Part 60, | Standards of                       | Dye tanks do not contain          |
|---------------|-----------------|------------------------------------|-----------------------------------|
| Storage Tanks | Subpart Kb      | Performance for                    | petroleum liquids or volatile     |
| Storage Talks | Subpart Ko      | Storage Vessels for                | organic compounds.                |
|               |                 | Volatile Organic                   | organic compounds.                |
|               |                 | Liquid Storage                     |                                   |
|               |                 | Vessels (Including                 |                                   |
|               |                 | Petroleum Liquid                   |                                   |
|               |                 | Storage Vessels) for               |                                   |
|               |                 | Which Construction,                |                                   |
|               |                 | ,                                  |                                   |
|               |                 | Reconstruction, or<br>Modification |                                   |
|               |                 |                                    |                                   |
|               |                 | Commenced after July               |                                   |
| A1 C/         |                 | 23, 1984                           |                                   |
| Alum Storage  | 40 CFR Part 60, | Standards of                       | Alum is not a petroleum liquid or |
| Tanks         | Subpart K       | Performance for                    | a volatile organic compound.      |
|               |                 | Storage Vessels for                |                                   |
|               |                 | Petroleum Liquids for              |                                   |
|               |                 | Which Construction,                |                                   |
|               |                 | Reconstruction, or                 |                                   |
|               |                 | Modification                       |                                   |
|               |                 | Commenced after                    |                                   |
|               |                 | June 11, 1973, and                 |                                   |
|               |                 | Prior to May 19, 1978              |                                   |
| Alum Storage  | 40 CFR Part 60, | Standards of                       | Alum is not a petroleum liquid or |
| Tanks         | Subpart Ka      | Performance for                    | a volatile organic compound.      |
|               |                 | Storage Vessels for                |                                   |
|               |                 | Petroleum Liquids for              |                                   |
|               |                 | Which Construction,                |                                   |
|               |                 | Reconstruction, or                 |                                   |
|               |                 | Modification                       |                                   |
|               |                 | Commenced after                    |                                   |
|               |                 | May 18, 1978, and                  |                                   |
|               |                 | Prior to July 23, 1984             |                                   |

| Alum Storage  | 40 CFR Part 60, | Standards of           | Alum is not a petroleum liquid or |
|---------------|-----------------|------------------------|-----------------------------------|
| Tanks         | Subpart Kb      | Performance for        | a volatile organic compound.      |
|               | 1               | 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        | 40 CFR Part 60, | Standards of           | Sodium hydroxide is not a         |
| Hydroxide     | Subpart K       | Performance for        | volatile organic compound.        |
| Storage Tanks |                 | Storage Vessels for    |                                   |
|               |                 | Petroleum Liquids for  |                                   |
|               |                 | Which Construction,    |                                   |
|               |                 | Reconstruction, or     |                                   |
|               |                 | Modification           |                                   |
|               |                 | Commenced after        |                                   |
|               |                 | June 11, 1973, and     |                                   |
|               |                 | Prior to May 19, 1978  |                                   |
| Sodium        | 40 CFR Part 60, | Standards of           | Sodium hydroxide is not a         |
| Hydroxide     | Subpart Ka      | Performance for        | volatile organic compound.        |
| Storage Tanks |                 | Storage Vessels for    |                                   |
|               |                 | Petroleum Liquids for  |                                   |
|               |                 | Which Construction,    |                                   |
|               |                 | Reconstruction, or     |                                   |
|               |                 | Modification           |                                   |
|               |                 | Commenced after        |                                   |
|               |                 | May 18, 1978, and      |                                   |
|               |                 | Prior to July 23, 1984 |                                   |

| Sodium<br>Hydroxide<br>Storage Tanks | 40 CFR Part 60,<br>Subpart Kb | Standards ofPerformance forStorage Vessels forVolatile OrganicLiquid StorageVessels (IncludingPetroleum LiquidStorage Vessels) forWhich Construction,Reconstruction, orModificationCommenced after July | Sodium hydroxide is not a<br>volatile organic compound.                                |
|--------------------------------------|-------------------------------|---|--|
| Sodium<br>Hydroxide<br>Storage Tanks | §19.10                        | 23, 1984<br>Regulations for the<br>Control of Volatile<br>Organic Compounds<br>in Pulaski County  | This facility is not located in<br>Pulaski County or in a non-<br>attainment area.     |
| Cooling Towers                       | 40 CFR Part 63,<br>Subpart Q  | National Emission<br>Standards for<br>Hazardous Air<br>Pollutants for<br>Industrial Process<br>Cooling Towers   | No chromium-based water<br>treatment chemicals are used in<br>cooling water treatment. |
| No. 1A<br>Brownstock<br>Decker       | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills   | Source was constructed prior to the effective date.                                    |
| No. 2<br>Brownstock<br>Decker        | 40 CFR §60.284                | Standards of<br>Performance for Kraft<br>Pulp Mills   | Monitoring not feasible for<br>deckers and concentration of<br>TRS below 5 ppm.        |
| No. 2<br>Brownstock<br>Decker        | 40 CFR §60.285                | Standards of<br>Performance for Kraft<br>Pulp Mills   | Particulate and TRS standards do not apply to deckers.                                 |
| 37                                   | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills   | Pulpdryers are not included in this subpart's affected sources.                        |
| Finishing Room                       | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills   | Finishing rooms are not included<br>in the subpart's affected sources.                 |
| Shipping<br>Operations               | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>Pulp Mills   | Shipping operations are not<br>included in the subpart's affected<br>sources.          |
| 38                                   | 40 CFR Part 60,<br>Subpart BB | Standards of<br>Performance for Kraft<br>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 shall be considered a significant activity even if this activity meets the criteria of \$26.304 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 1, 2003.

| 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<br>purposes containing chemicals with vapor pressure less than or<br>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  |
|--|------|
| Paper machine Caustic Storage Tanks  | A-4  |
| Miscellaneous and/or Temporary Caustic Storage Tanks Used<br>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<br>with less than 3% by weight of the maximum container volume<br>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 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 & 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 September 26, 2002]
- 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 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 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 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 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 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality Air Division ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 8. The permittee shall 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 Regulation19, § 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 my 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 shall 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 shall 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 by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

- 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), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §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 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 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 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 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 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 26, §26.701(F)(5)]

- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 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 26, §26.701(H)]
- 17. If the permit allows different operating scenarios, the permittee shall, 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 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 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 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 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 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 shall 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 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;
- e. and 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 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 A.C.A. §8-4-304 and §8-4-311]