

June 19, 2000

Tony Jaegel, Pulp Mill
Environmental Manager
Louisiana-Pacific Samoa, Inc.
PO Box 218
Samoa, CA 95564

RE: Louisiana-Pacific
Facility # 037-12

**OFFICIAL NOTICE OF
PROPOSED TITLE 5 PERMIT ISSUANCE**

Dear Mr. Jaegel:

This is official notice of our intent to issue a permit to operate for your facility located at Samoa in accordance with Regulation 5, Title 5 Permits. A copy of the proposed permit is included. We are also noticing this action for public review and comment for a 30 day time period. This is your opportunity to provide comments on the draft permit. Attached is a copy of this notice which is being published in the Times-Standard newspaper's public notice section. Once the 30 public review period has elapsed, the EPA, Region IX will have a 45 day comment period.

Sincerely,

Robert Clark
District Engineer

cc: Air Resources Board
Mendocino County APCD
Shasta County AQMD
Siskiyou County APCD
Tehama County APCD

DISTRICT TITLE V PERMIT SUMMARY FOR LOUISIANA-PACIFIC SAMOA

For a description of pulp mill processes, and emissions, please see the District's publication, "North Coast Pulp Mill" on the District's web site at www.northcoast.com/~ncuaqmd.

Louisiana-Pacific operates a kraft pulp mill which was constructed in 1965. The mill began operation with two separate recovery furnaces and smelt dissolvers and in 1990 these facilities were shutdown and replaced with a new low odor recovery furnace and related smelt dissolver. The new electrostatic precipitator on the recovery furnace resulted in a significant reduction in particulate emissions. Total reduced sulfur emissions were also significantly reduced in comparison to the old furnaces. The new furnace was permitted in accordance with District NSR/PSD requirements and a PSD permit for the NOx emissions from the furnace has been issued by the EPA. Local District TRS, PM, and opacity permit limits are more stringent than the corresponding limits contained in the Federal NSPS for pulp mills.

During 1993, LP implemented construction of a new noncondensable gas collection, transport, and incineration system. Additional sources of NCGs not previously captured were incinerated, and a dual incineration system with an incinerator(thermal oxidation unit) and lime kiln providing improved incineration of these NCGs

During 1994, LP implemented a new wastewater cleanup effort which resulted in the construction of a condensate stripper. The stripper removes organics from wastewater generated in the plant which are then burned in the incinerator. This clean condensate can be reused in the plant for some processes, but mainly the effluent is no longer contaminated.

During July 1994, LP eliminated the use of chlorine and chlorine dioxide at their pulp bleach plant. This mill became the first in the nation to go TCF, totally chlorine free. This resulted in a significant reduction in HAPs in both air and wastewater effluent.

During 1998, LP completed construction and began operation of the first MACT project by a pulp mill for total compliance with 40 CFR Part 63, Subpart S. The mill began operating the system in late November 1998, and it captures all emissions from several High Volume Low Concentration sources in the mill. Many of these sources had emitted HAPs mainly in the form of methanol along with some TRS emissions. These are now captured and incinerated in the tertiary combustion air system of the recovery furnace.

With these projects complete and all systems operating in compliance, the mill now has essentially five permit units:

- A. Recovery Furnace - new 1990 furnace
- B. Smelt Dissolving Tank - new 1990 dissolving system
- C. Lime Kiln - old original 1965 system
- D. Noncondensable Gas System - new/modified control system; subject to MACT
- E. HVLC "Other Source" System - new control system; subject to MACT

Only three of these, the furnace, kiln, and dissolver are direct emissions sources, since the Noncondensable Gas System and HVLC "Other Source" System exhausts are totally captured and incinerated. The incinerator and kiln which incinerate these exhausts do have emissions. The incinerator and recovery furnace are operated at high temperature for complete destruction of the ncg's and it has a caustic scrubber for SO2 removal. It vents to the main stack.

A. Recovery Furnace - This permit unit contains language from the District's ATC permit issued in 1991 and the new EPA PSD permit issued in 1999, with needed gap filling and limit streamlining. One change is a clarification for malfunctions in the mill which cause low liquor to be available for burning in the furnace. We have added the following as related to the sulfur dioxide limitation:

- a. This limitation does not apply during periods of low liquor flow or smelt bed height due to a planned shutdown or startup, or during a furnace or mill breakdown condition which would create low liquor flow or smelt bed height conditions[Regulation 1, Rule 240(d)].

One of the means of controlling SO2 in a furnace is with adequate bed height, temperatures and air. This allows a sodium fume to be existent over the bed which combines with SO2 produced to form sodium sulfate. When inadequate bed height and temperatures exist this sodium fume cannot be generated in sufficient amounts to allow for SO2 interaction. Therefore, during these infrequent periods, we are recognizing this fact and providing an exemption. Operation over the past nine years supports this addition to the permit.

In addition, we have developed streamlined emissions limits as follows:

1. Particulate Matter

Limit Source	Limit	Units	Correction	Monitoring
ATC limit, or				
Rule 420(d)(1)(b)	0.025	gr/dscf	8% O2	EPA Method 5
NSPS	0.044	gr/dscf	8% O2	EPA Method 5
SIP Rule 420(c)	0.10	gr/dscf	12%CO2	EPA Method 5

The ATC limit of 0.025 gr/dscf @ 8% O2 is the more stringent limit and will be placed in the permit. The 12% CO2 correction for SIP Rule 420(c) is equivalent to 8% O2.

2. Visible Emissions

Limit Source	Limit Ave.	Units	Correction	Monitoring
ATC limit, or				
Rule 410(d)	20 6 minute	% opacity	None	COMS
NSPS	35 6 minute	% opacity	None	COMS
SIP Rule 410(a)	40 3 min/hr	% opacity	None	Fed Meth. 9

The ATC limit of 20% opacity is the more stringent limit and will be placed in the permit. In addition, the NSPS has a 6% per quarter excess emission allowance which the ATC does not have. Both exclude startups, shutdowns, and malfunctions. The SIP Rule 410(a) cannot be used with Method 9(eyeball method) since the stack is 300 feet tall and not situated where the measurement can be made. In any case, continuous analysis is required by the ATC and NSPS and Method 9 is not meant for continuous measurement.

3. Total Reduced Sulfur

Limit Source	Limit Ave.	Units	Correction	Monitoring
ATC limit, or				
Rule 450(a)	3 12hr.ave.	ppmv	8% O2	EPA Method 16B
NSPS	5 12hr.ave.	ppmv	8% O2	EPA Method 16
SIP Rule 57(a)	60 ?	ppmv	none	NCASI method
or	0.012(Hs) ² day	pounds	none	NCASI method

The ATC limit of 3 ppmv @ 8% O2 on a 12-hr. basis will be placed in the permit. The monitoring differences are not significant. Method 16 measures each TRS component separately with a GC in a semi-continuous manner. Method 16B allows the oxidation of the TRS into SO2 for measurement by an SO2 analyzer in a continuous manner. 16B is the more widely used and accepted method. The NSPS limit allows a 1% excess emission per quarter, the ATC does not.

Rule 57 dates back to 1972. The concentration of 60 ppm for comparison with the daily weight limit equates to about 1106 lbs. per day. The 0.012(Hs)² value equates to 1080 pounds per day for a 300 foot tall recovery furnace stack. The 12 hour limit of 3 ppmv at 145,000 dscf equates to 55.3 pounds per day.

In all cases continuous monitoring is required.

B. Lime Kiln - The emissions limits for the lime kiln are from Regulation 1 of the District and represent a former District Rule 420(d) contained in the SIP and a more current Rule 420(d)(2)(a) not contained in the SIP. The District is proposing the streamlining of these limits into a single limit which is the current Rule 420(d)(2)(a). This limit would become Federally enforceable. This concept is contained in White Paper 2 on page 10, item d. and page 11 paragraph 2 which states "Use a previously "State-only" requirement as the streamlined requirement when it is at least as stringent as any applicable Federal requirement it would subsume(this requirement would then become a federally-enforceable condition in the part 70 permit)".

1. Particulate Matter

Limit Source	Limit	Units	Correction	Monitoring
Rule 420(d)(2)(a),	0.20	gr/dscf	10% O2	CARB Method 5
and	1.0	lb/adtp		
SIP Rule 420(d),	0.20	gr/cf	None	CARB Method 5
and	process weight rate limit determination from Table			

This rule change was adopted on 1/19/89 in order to provide a rule specific for pulp mill lime kiln particulate matter emissions. The Rule 420(d) did not adequately address the lime kiln since it is for non-combustion sources, however the lime kiln is classified as a combustion source in federal rules(ie MACT). However in checking past records, this rule was used for determining compliance with Rule 420(d). Therefore it would be wise at this time to utilize the current rule and not include the old 420(d) rule in the permit. In any case, the current rule of 1.0 lbs/adtp is the more restrictive limit of those listed. Grain loading in either rule was not and is not the more restrictive limit. The District proposes to use the current Rule 420(d)(2)(a) as the basis for limiting particulate matter emissions in the permit.

2. Total Reduced Sulfur

Limit Source	Limit Ave.	Units	Correction	Monitoring
Rule 450(b),	20 daily ave.	ppmv	none	EPA Method 16B
and	0.1 daily ave.	lbs/adtp	none	EPA Method 16B
SIP Rule 57(a)	60 ?	ppmv	none	NCASI method
or	0.012(Hs) ² day	pounds	none	NCASI method

SIP rule 57 dates back to 1972 and has been superseded many times since by more restrictive requirements. 20 ppm daily ave calculates to 43 lbs/day while 0.012(Hs)² at 82 foot stack height calculates to 81 lbs/day. It is not clear how the 60 ppm requirement is averaged, but if it is like the current rule, it would be on a daily average. This seems likely since prior to the current rule, the limit was 40 ppm daily average. This means the current rule is more restrictive and placing it in the permit will cause it to be federally enforceable.

3. Visible Emissions - Based upon inspections of this source over the past 30 years, the District has not witnessed visible emissions from this venturi wet scrubber controlled kiln that are greater than 10 percent opacity. We are proposing to not require any VEE for this source since the limit is 40 percent opacity and VE's have not approached this level ever. In addition due to the wet scrubber and humid coastal environment it is very difficult to separate the moisture from the residual plume in order to accurately read the emissions from the stack.

4. Sulfur Dioxide - No emissions testing is being required for sulfur dioxide from the lime kiln due to the inherent ability of CaCO₃ to scrub SO₂. Testing has shown sulfur dioxide to be less than 1 ppmv.

C. Smelt Dissolver

1. Particulate Matter

Limit Source	Limit	Units	Correction	Monitoring
ATC limit, or				
Rule 420(d)(3)(b)	0.20	lbs/tbls	none	CARB Method 5
Rule 420(d)(3)(a)	0.5	lbs/adtp	none	CARB Method 5
NSPS	0.20	lbs/tbls	none	EPA Method 5
SIP Rule 420(d)	0.20	gr/cf	none	CARB Method 5

The 0.20 lbs/tbls is equivalent to about 0.15 gr/cf and 0.36 lbs/adtp. Therefore the ATC requirement of 0.20 lbs/tbls is the most restrictive limit and will be retained in the permit. The NSPS uses the EPA Method 5 which does not account for the condensable catch as does the CARB Method 5, so the ATC is more restrictive.

2. Total Reduced Sulfur

Limit Source	Limit Ave.	Units	Correction	Monitoring
ATC limit, or				
Rule 450(c)	0.0168	lbs/tbls	none	EPA Method 16B
NSPS	0.033	lbs/tbls	none	EPA Method 16
SIP Rule 57(a)	60 ?	ppmv	none	NCASI method
or	0.012(Hs) ² day	pounds	none	NCASI method

Interesting how the District limit is one-half the NSPS limit. The District adopted the NSPS in the 1980's when the NSPS was also 0.0168 lbs/tbls. The NSPS was changed later to about twice the original value due to difficulties by industry meeting the limit. The District did not change its rule and retains a limit twice as stringent as the NSPS!

Rule 57 dates back to 1972. The concentration of 60 ppm for comparison with the daily weight limit equates to about 76 lbs. per day. The $0.012(\text{Hs})^2$ value equates to 480 pounds per day for a 200 foot elevation stack. The 0.0168 lbs/tbls equates to about 19 lbs/day. The current District standard is the more stringent and will be placed in the permit.

3. Visible Emissions - Due to safety related issues with the 10' stack from this source located at the top of the 200 ft. high recovery furnace building, taking VEE of the stack is difficult due to wet plume characteristics, high winds, lack of distance from the stack to observe any trailing plume and probable lack of background. In all, with the 40% opacity limit and lack of noticeable plume from the ground it seems practical to not require any VE monitoring of this source.

D. Noncondensable Gas System - This system collects and transports the gases containing TRS and organics to either the lime kiln or an incinerator for destruction. This system captures both the very concentrated gas streams as well as a few low concentration streams. The system is divided into three sections as detailed in the permit unit. The sources captured with this system are subject to the Federal MACT in Subpart S which is not effective for about 7 years, however the District had a compliance schedule which required compliance with the MACT by December 1, 1998. LP is currently in compliance with the requirements of the MACT which have been included in the permit unit.

E. HVLC Other Sources - This is a new system constructed and operational in 1998 which was designed to meet the Federal MACT Subpart S requirements and the Districts compliance schedule. The sources captured in this system have low mass rates of TRS, and some HAPS most of which is methanol. The gases are routed to the tertiary combustion air system of the recovery furnace. The District required several sources be captured which are not required by the MACT, namely the black liquor tanks, salt cake mix tank, decker, and knotter. The system is operating in compliance with District and MACT requirements which are included in the permit unit.

**REQUEST FOR PUBLIC COMMENT
ON PROPOSED
FEDERAL TITLE 5 OPERATING PERMIT ISSUANCE
TO
LOUISIANA-PACIFIC SAMOA, INC.,
SAMOA**

PURSUANT TO REGULATION 5 OF THE NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT, THE AIR POLLUTION CONTROL OFFICER HAS MADE A PRELIMINARY DECISION TO ISSUE A TITLE 5/PART 70 OPERATING PERMIT TO LOUISIANA-PACIFIC SAMOA LOCATED AT SAMOA. THE PROPOSED PERMIT FOR LOUISIANA-PACIFIC SAMOA DOES NOT INVOLVE AN INCREASE IN PERMITTED EMISSIONS BUT INVOLVES THE ISSUANCE OF AN OPERATING PERMIT TO MEET 1990 FEDERAL CLEAN AIR ACT REQUIREMENTS.

WRITTEN PUBLIC COMMENTS REGARDING THE PROPOSED DECISION WILL BE RECEIVED BY THE DISTRICT FOR A PERIOD OF (30) DAYS AFTER PUBLICATION OF THIS NOTICE AND WILL RECEIVE DUE CONSIDERATION BEFORE FINAL ACTION IS TAKEN. A PUBLIC HEARING TO RECEIVE COMMENT ON THIS PROPOSED DECISION HAS NOT BEEN SCHEDULED, BUT ONE MAY BE REQUESTED BY WRITING TO THE DISTRICT.

AFTER THE CLOSE OF THIS COMMENT PERIOD, THE DISTRICT WILL PROVIDE THE U.S. EPA WITH A 45-DAY REVIEW AND OBJECTION PERIOD FOR THIS PROPOSED DECISION. IF THE U.S. EPA DOES NOT OBJECT IN WRITING, ANY PERSON MAY PETITION THE U.S. EPA ADMINISTRATOR WITHIN 60 DAYS AFTER THE EXPIRATION OF THE ADMINISTRATOR'S 45 DAY REVIEW PERIOD TO MAKE SUCH OBJECTION. ANY SUCH PETITION SHALL BE BASED ONLY ON OBJECTIONS TO THE PERMIT THAT WERE RAISED WITH REASONABLE SPECIFICITY DURING THE PUBLIC COMMENT PERIOD UNLESS THE PETITIONER DEMONSTRATES THAT IT WAS IMPRACTICABLE TO RAISE SUCH OBJECTIONS WITHIN SUCH PERIOD, OR UNLESS THE GROUNDS FOR SUCH OBJECTION AROSE AFTER SUCH PERIOD.

THE APPLICATION, PROPOSED PERMIT AND SUPPORT DOCUMENTS ARE AVAILABLE FOR INSPECTION AT THE NORTH COAST UNIFIED AQMD, 2300 MYRTLE AVENUE, EUREKA, CA 95501, PHONE 707/443-309, OR AT THE DISTRICT'S WEB SITE AT ADDRESS www.northcoast.com/~ncuaqmd. WRITTEN COMMENTS ON THE PROPOSED DECISION OR A REQUEST FOR PUBLIC HEARING MAY BE MAILED OR HAND CARRIED TO THE SAME LOCATION.