

M E M O R A N D U M

TO: John Millican
FROM: J. P. Subramani *JPS 8/30*
DATE: August 30, 1989
RE: Emission limits on Incinerators dedicated for TRS control

At your request, I contacted the following paper mills to ascertain the incinerators dedicated for TRS control.

1. International Paper: (Mr. Scot Oglesby; 205-470-4730)
Gardener, OR and Mansfield Mills
Camden Mill
Texarkana Mill (Georgetown?)
2. Simpson Co., Pasadena, Texas: (Mr. Don Hatfield; 713-475-6269)
3. Westvaco Mill, Kentucky: (Butch Jones; 502-335-3131)
4. Union Camp, S.C.: (Susan Arlene; 803-353-7700)
5. PH Glatfelter Mill: (Neal Carter 717-225-4711)
6. Pentec Paper: (Tom Detweiler; 814-965-2521)
7. Champion, Alabama: Mr. David Sherrod; 205-637-2741

None of these companies have a particulate emission limit on the TRS combustion device (incinerator). All are TRS control systems and have only TRS or TRS surrogate limits.



Georgia-Pacific Corporation *Palatka Operations*
Southern Pulp & Paper Division

P.O. Box 919
Palatka, Florida 32078-0919
Telephone (904) 325-2001

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OCT 6 1989

DER-BAQM

October 4, 1989

Certified Mail

Mr. Clair Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Georgia-Pacific Construction Permits
AC54-142282, 283, 288, and 289

Dear Mr. Fancy:

We appreciate very much the consideration granted Messrs Adams, Dutton and Millican in the meeting in your office on August 31, 1989 to discuss the referenced permits. Although, as you correctly stated in the meeting, the referenced permits were accepted, we are extremely grateful that you have agreed to consider the concerns which have emerged in the start up and operation of the TRS collection and incineration systems.

The purpose of this letter is to request that these permits be amended in accordance with the discussions of August 31st. Specifically, we are requesting the following amendments which reference the Specific Conditions in the permits:

Specific Condition 4

Mr. Harley directed our attention to Ch. 17-600(1)(a)1 which provides that incinerators of less than 50 tons per day are subject to no visible emissions (5 percent opacity) and to Ch. 17-600(1)(a)2 "No objectionable odor". Attachment 1 has the calculations which confirm that the daily charging rate is less than 50 tons per day; and therefore, as Mr. Harley suggested, it is appropriate for this incinerator to be regulated by visible emissions rather than being subject to a particulate emission limit.

Also, the objectionable odor limit for a TRS incinerator should be imposed at the property boundary. It is apparent that the gasses would have an objectionable odor at the stack exit; therefore, we request that Specific Condition 4 be altered to read:

There shall be no visible emissions (5 percent opacity) except that visible emissions of 20% opacity are allowed for up to three minutes in any one hour. There shall be no objectionable odor from the incinerator beyond the property boundary.

We believe this request is in accordance with Mr. Harley's suggestion and with the agreement developed in the meeting.

Specific Condition 6c

This condition anticipated the methanol from the steam stripper being fed to the incinerator as a liquid. This is not the case as the methanol is fed as a gas straight from the stripper. We are concerned that any requirement to measure the gas flow would impose a safety hazard. We know of no safe method to measure the gas flow while the incinerator is operating. The department's primary concern with this requirement is to assure proper operation of the system. We suggest that the incinerator temperature and SO₂ test from this unit provide this assurance. Therefore, we request that specific condition 6c be deleted.

Specific Condition 7a

As explained above we are unable to measure the gas flow rate from the steam stripper and thus unable to measure the total BTU input to the incinerator. The 8.0 million BTU's/hr. is a reasonable number from design calculations; however, it should not be a permit limit. The appropriate concern of the Department is control of TRS gas to the atmosphere and the direct way to assure this control is by measuring temperature as provided in the rule. Adequate fuel to incinerate all of the TRS gas flow to the incinerator would seem to be the applicable concern for the Department.

Specific Condition 7b

The sulfur content of the natural gas used is a requirement which can and will be met.

Specific Condition 7c

We know of no way to control the sulfur content of the methanol or to measure the flow while operating. Therefore we request that all of Specific Condition 7 be altered to read:

Natural gas with a sulfur content not to exceed 0.1% by weight may be used during periods of startup, shutdown and malfunction providing the maximum hourly quantity does not exceed 7,619 cu. ft. (60 degrees F and 14.7 PSIA)/hour. Natural gas may also be used as a supplemental fuel.

Specific Conditions 3 & 8

Specific Condition 3 imposes a 5PPMV limit on the incinerator, a mass TRS emission limit and an objectionable odor limit. Specific Condition 8 imposes a temperature limit and a minimum time of 0.5 seconds.

Ch. 17-2.600(4)(c)1.a. requires that "Gaseous emissions shall be collected and incinerated in" . . . "a combustion device meeting the requirements of either Rule 17-2.600(4)(c)6., or Rule 17-2.660, FAC, or;" (emphasis added) meet 17-2.600(4)(c)1.b. if a means other than incineration is used. We are utilizing an incinerator so 17-2.600(4)(c)1.b. clearly does not apply. This leaves us subject to either 17-2.600(4)(c)6 or 17-2.660, not to both. We are subject to the NSPS requirements of 17-2.660 and as such should not be required to meet 17-2.600(4)(c)6. We have supplied you with the names and phone numbers of persons in the industry who operate incinerators and/or strippers. None of them have mass TRS emission limits other than for PSD determination. No other system in Florida permitted to comply with the existing source rule has mass emission limits except for PSD purposes.

Mr. Harley stated that these conditions were based on his understanding of the rule. Since our interpretation of the rule differs from Mr. Harley on this issue, we have asked Mr. Terry Cole to discuss the matter with Ms. Betsy Hewitt to resolve the legal interpretations.

Based on our understanding of the regulations, we respectfully request the following changes:

Delete Specific Condition 3.

Note that the objectionable odor limit has been included in our requested Specific Condition 4.

Leave Specific Condition 8 as written.

Specific Condition 11

This specific condition converts procedures recommended by the manufacturer to enforceable permit conditions. Frequently these procedures are inappropriate for a specific site and can have a negative impact (i.e., excessive system downtime).

Therefore, we request that Specific Condition 11 be changed to delete "recommended by the instrument manufacturer" and require "in accordance with regulations and accepted industry practice".

The discussions of August 31 appear to have developed agreement on this item.

Specific Condition 13

We discussed the requirement for annual compliance testing and seemed to agree that with the continuous monitoring required, annual testing did not appear to be necessary. Therefore, we request that the annual compliance test requirement be changed to a one time test to confirm design performance.

In deference to your request that we not try to rewrite the permit, we have limited our request for changes to 6 specific conditions. One of these, (S.C. 4) is a suggestion from Mr. Harley with which we concur. One other, (S.C. 3) we have asked Mr. Cole to discuss with Ms. Hewitt. The remaining four (S.C. 6, 7, 11, and 13) appear not to be significant environmental issues for the Department. All of them are well within interpretations of the rules which the Department has applied in writing other TRS permits.

The discussion with you and Mr. Harley was constructive and cooperative. We appreciate this and hope that you can approve the request. If you need any additional information please call Mr. Vernon Adams at 904-325-2001.

Respectfully yours,


~~Henry Hirschman~~
General Manager

cc: V. L. Adams
W. L. Baxter
D. Dutton
M. Harley
J. Millican
E. Schmidt

Attachment 1

The construction permit application for the incinerator provides the TRS content of the gasses going to the incinerator (reported as lbs/hr of sulfur) in Attachment B of the application. The table referenced above indicates a 24 hour maximum feed rate of 392 lbs/hr of TRS (reported as sulfur). Multiplying this rate by 24 hours per day provides you with a daily feed rate of 9408 lbs/day of TRS (reported as sulfur).

$$392 \text{ lbs/hr} \times 24 \text{ hrs/day} = 9408 \text{ lbs/day}$$

The major recognized components of TRS are H_2S , CH_3SH , CH_3SCH_3 , and CH_3SSCH_3 . Dimethylsulphide, CH_3SCH_3 , has the highest ratio of molecular weight to sulphur content of these compounds (62 to 32). If you assume that all of the TRS being fed to the incinerator is dimethylsulphide (a worst case assumption) then your daily feed rate would equal the pounds of sulfur per day times the molecular weight of CH_3SCH_3 divided by the molecular weight of sulfur.

$$9,408 \text{ lbs. S/day} \times 62/32 = 18,228 \text{ lbs. TRS/day as } \text{CH}_3\text{SCH}_3$$

To convert this number to tons/day you divide the pounds per day by 2000.

$$18,228 \text{ lbs/day} / 2000 \text{ lbs/ton} = 9.114 \text{ tons/day}$$

The 9.114 tons/day feed rate is obviously less than the 50 tons/day mentioned in Ch. 17-600(1)(a)1.



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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To: _____	Location: _____
To: _____	Location: _____
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From: _____	Date: _____

Interoffice Memorandum

TO: File
FROM: Mike Harley *Mike H*
DATE: November 30, 1989

SUBJ: Construction Permits For Georgia-Pacific's non-NSPS Batch Digester System (AC 54-142282), non-NSPS Multiple Effect Evaporation System (AC 54-142283), and the NSPS Condensate Stripper System (AC 54-142288) to be incinerated in the TRS Incinerator (AC 54-142291)

In their letter of October 4, 1989, Georgia-Pacific Corporation requested that Specific Condition No. 3 of permits AC 54-142282, 283, 288, and 289 be deleted. The permits were issued on April 26, 1988, and accepted by the permittee. After reviewing the company's letter, the permit document, and our intent in drafting the regulation, I strongly recommend denial of the company's request. As the principal author of the state rule requirements, Florida's TRS 111(d) Plan, and the subject permit conditions (Nos. 3 and 8), I believe the regulations, plan, and permit are consistent and correct as they are applied in the permits that were issued on April 26, 1988. A detailed basis for my conclusion is presented in the following discussion. The basis for this conclusion is such that the conclusion would not be changed if the non-NSPS multiple effect evaporation system (AC 54-142283) and the non-NSPS digester system (AC 54-142282) became subject to the federal NSPS. Please note that the permittee's opportunity to challenge the permit conditions in question expired more than a year ago. Also note that the permittee did not choose to legally contest these conditions at that time. Further, the Department does not intend to reopen this permit (especially Specific Conditions Nos. 3, 8, and 11) for renegotiation based on the changes that were made to Specific Conditions Nos. 4, 6, and 7 to accommodate requests by the company.

Permittee's Objection To Specific Condition No. 3
Of The Document For Permits AC 54-142282
AC 54-142283, AC 54-142288, and AC 54-142291

The permittee's letter of October 4, 1989, states:

"Specific Condition 3 imposes a 5 PPMV limit on the

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Permittee's Objection To SC 3 Of Permits AC 54-142282,
AC 54-142283, AC 54-142288, and AC 54-142291--Cont'd.

incinerator, a mass emissions limit and an objectionable odor limit. Specific Condition 8 imposes a temperature limit and a minimum time of 0.5 seconds."

"Ch. 17-2.600(4)(c)1.a. requires that 'Gaseous emissions shall be collected and incinerated in ' . . . ' a combustion device meeting the requirements of either Rule 17-2.600(4)(c)6., or Rule 17-2.660, FAC, or " (emphasis added) meet 17-2.600(4)(c)1.b. if a means other than incineration is used. We are utilizing an incinerator so 17-2.600(4)(c)1.b. clearly does not apply. This leaves us subject to either 17-2.600(4)(c)6. or 17-2.660, not to both. We are subject to the NSPS requirements of 17-2.660 and as such should not be required to meet 17-2.600(4)(c)6. We have supplied you with the names and phone numbers of persons in the industry who operate incinerators and/or strippers. None of them have mass TRS emission limits for other than PSD determination. No other system in Florida permitted to comply with the existing source rule has mass emission limits except for PSD purposes."

The permittee seeks to delete the permit condition limiting the TRS emissions from the TRS incinerator by arguing that the limits applicable to the non-NSPS digester system, non-NSPS multiple effect evaporator system, and NSPS condensate stripper system preclude the Department's ability to limit TRS emissions from the TRS incinerator. A review of the permit document and our intent during the drafting of the regulation leads to an entirely different conclusion.

General Explanation of The Permit Document

The permit document contains conditions that apply to four permitted systems. The permitted systems are the non-NSPS Batch Digester System (AC 54-142282), which consists of 13 individual batch digester systems; the non-NSPS Multiple Effect Evaporation System (AC 54-142283), which consists of 4 individual multiple effect evaporator systems; the NSPS Condensate Stripper System (AC 54-142288); and, the TRS Incinerator (AC 54-142291). Each of the permitted sources is subject to specific conditions that appropriately limit the emissions and operation rates of the sources. It is important to note that the Department considers the TRS Incinerator (AC 54-142291) to be a source pursuant to Rule

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General Explanation of The Permit Document--Cont'd.

17-2.100(91) [Definitions-Incinerator] and Rule 17-2.100(179) [Definitions-Source Or Stationary Source]; and a control device pursuant to Rule 17-2.100(10) [Definitions-Air Pollution Control Equipment]. This position was stated in the March 17, 1988, Technical Evaluation and Preliminary Determination for Georgia-Pacific Corporation's Digester System (Permit No. AC 54-142282), Multiple Effect Evaporation System (Permit No. AC 54-142283), Condensate Stripper System (Permit No. AC 54-142288), and TRS Incinerator (Permit No. AC 54-142291).

Explanation Of Standards Applicable To
non-NSPS Batch Digester System (AC 54-142282)
non-NSPS Multiple Effect Evaporation System (AC 54-142283)
and the NSPS Condensate Stripper System (AC 54-142288)

Specific Condition No. 2 requires the emissions from the non-NSPS Batch Digester System (AC 54-142282), non-NSPS Multiple Effect Evaporation System (AC 54-142283), and the NSPS Condensate Stripper System (AC 54-142288) to be incinerated in the TRS Incinerator (AC 54-142291). This is consistent with the requirements of Rule 17-2.600(4)(c)1.a. [Specific Source Emission Limiting Standards-Kraft (Sulfate) Pulp Mills and Tall Oil Plants-Total Reduced Sulfur (TRS)-Digester Systems, Multiple Effect Evaporator Systems, Condensate Stripper Systems], which applies to digester systems, multiple effect evaporator systems and condensate stripper systems. The permittee believes the election to incinerate emissions in an incinerator that subjects emissions from the digester, evaporator, and condensate stripper systems to 1200°F for 0.5 second exempts the incinerator from regulation under Rule 17-2.600(4)(c)6. [Specific Source Emission Limiting Standards-Kraft Pulp Mills-TRS-Other Combustion Devices Used to Incinerate TRS Emissions].

The federal new source performance standard in 40 CFR 60.283(a)(1)(iii) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Standard for Total Reduced Sulfur (TRS)-Digester System, Brown Stock Washer System, Multiple Effect Evaporator System, Condensate Stripper System] states, ". . . no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere: (1) From any digester system, brown stock washer system, multiple effect evaporator system, or

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Explanation Of Standards For Digester System (AC 54-142282),
Evaporation System (AC 54-142283), and Stripper System
(AC 54-142288)--Cont'd.

condensate stripper system any gases which contain in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met:
(iii) The gases are combusted with other waste gases in an incinerator or other device, or combusted in a lime kiln or recovery furnace not subject to the provisions of this subpart, and are subjected to a minimum temperature of 1200°F for at least 0.5 second; or" A careful reading of this regulation shows the standard to apply solely to the gases from the NSPS condensate stripper system. The requirements are that the gases from the affected NSPS sources (i.e., condensate stripper system) are to be incinerated in a device such as an incinerator and that the gases from the affected NSPS sources (i.e., condensate stripper system) are to be subjected to 1200°F for 0.5 second. NOTE: The federal NSPS in 40 CFR 60 Subpart BB [Standards of Performance for Kraft Pulp Mills] does not contain a specific TRS emission limiting standard for the TRS Incinerator (AC 54-142291).

Rule 17-2.600(4)(c)1.a. [Specific Source Emission Limiting Standards-Kraft Pulp Mills-TRS-Digester Systems, etc.] was intended to allow the applicant to elect to combine the gases from the non-NSPS Batch Digester System (AC 54-142282) and the non-NSPS Multiple Effect Evaporation System (AC 54-142283) with those from the NSPS Condensate Stripper System (AC 54-142288) prior to treatment in the TRS Incinerator (AC 54-142291).

Explanation Of Standards Applicable To
The TRS Incinerator (AC 54-142291)

Specific Condition No. 3 contains emission limitations that apply to the TRS Incinerator (AC 54-142291). The condition has been established pursuant to the requirements of Rules 17-2.660(2)(b) [Standards of Performance for New Stationary Sources (NSPS)-Applicability], 17-2.500(1)(c) [Prevention of Significant Deterioration-General Prohibitions], 17-2.520 [Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements-Applicability], and 17-4.070 [Standards of Issuing or Denying Permits; Issuance; Denial].

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Explanation Of Standards For TRS Incinerator
(AC 54-142291)--Cont'd.

Rule 17-2.660(2)(b) [Standards of Performance for New Stationary Sources (NSPS)-Applicability] states, "This section shall apply to all affected facilities, the construction or modification of which is commenced after the effective date of any Standard of Performance listed in Rule 17-2.660(2)(a), FAC, above, except that any emission limiting standard contained in Part VI which is more stringent than one contained in a Standard of Performance, which regulates emissions of pollutants or sources of emissions not regulated by an applicable Standard of Performance, shall apply." The federal new source performance standards for kraft pulp mills do not contain a specific TRS emission limiting standard for TRS incinerators. Rule 17-2.600(4)(c)6. [Specific Source Emission Limiting Standards-Kraft Pulp Mills-TRS-Other Combustion Devices] contains a specific TRS emission limiting standard for TRS incinerators. Therefore the standard is applicable to the permittee's TRS Incinerator (AC 54-142291).

NOTE: Page IV-4 of the May 25, 1985 TRS 111(d) Plan that was filed with the EPA states, "Any combustion device that is used to incinerate TRS gases which is not subject to another TRS emission limiting standard in Rule 17-2.600(4)(c) must achieve compliance with a limit of 5 ppm pursuant to the intent of the federal NSPS rules and 111(d) guidance." Page IV-10 of the plan states that Rule 17-2.660(2)(b) [Standards of Performance for New Stationary Sources (NSPS)-Applicability] was amended to qualify an existing provision without modifying its intent. One of the reasons for this provision was to eliminate an affected party's ability to use compliance with minimum temperature and retention time criteria as a means of avoiding the application of a specific and quantifiable TRS emission limiting standard in ppm, pounds per hour, and tons per year. A reading of the full text of 40 CFR 60.283(a)(1) makes it clear that the Department has correctly interpreted the intent of the federal regulation. The key is to avoid being misled into an improper construction by allowing the industry to break this requirement into small independent parts.

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Explanation Of Standards For TRS Incinerator
(AC 54-142291)--Cont'd.

Rule 17-2.500(1)(c) [Prevention of Significant Deterioration-General Prohibitions] states, "The Department shall include appropriate conditions in each permit issued to insure that the provisions of this section are not violated. Such conditions may include but are not limited to, specifying an enforceable emission limitation for a source or facility that is more restrictive than the allowable emission limitation that would otherwise apply."(emphasis added) Since TRS is a pollutant that is regulated pursuant to the requirements of Rule 17-2.500 [PSD], the limitation on concentration and mass emissions of TRS from the TRS Incinerator (AC 54-142291) conforms to this requirement. Such a limitation is also consistent with the requirements and guidance that we receive from the U.S. EPA.

Rule 17-2.520(1) [Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements-Applicability] states, "This section shall apply to all sources which are exempt from the new source review requirements of Sections 17-2.500 and 17-2.510 but which have not been exempted from the general permitting requirements of Section 17-2.210(1) by any provision of Chapters 17-2 or 17-4, Florida Administrative Code."(emphasis added) The operative words are, "new source review requirements." The new source review requirements of section 17-2.500 [PSD] are found in Rule 17-2.500(5) [PSD-Preconstruction Review Requirements]. So, a source that is subject to the requirements of Rule 17-2.520 [Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements] is not exempt from all other requirements of Rule 17-2.500 [PSD]. Rule 17-2.520(3)(b) [Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements-Permitting Requirements] states, "No permit shall be issued to any source subject to this section unless the Department determines that the construction or modification of the source would not interfere with the attainment and maintenance of any state or national ambient air quality standard or maximum allowable increase." It is appropriate to restrict the mass emissions of a source, even where a construction permit is issued for the first time, since a significant increase in TRS emissions from a source could potentially require the source to be reviewed pursuant to Rule 17-2.500(5) [PSD-Preconstruction Review Requirements].

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Explanation Of Standards For TRS Incinerator
(AC 54-142291)--Cont'd.

Rule 17-4.070(1) [Standards of Issuing or Denying Permits; Issuance; Denial] states, "A permit shall be issued to the applicant upon such conditions as the Department may direct, only if the permit applicant affirmatively provides the Department with reasonable assurance based on plans, test results, installations of pollution control equipment, or other information that the construction, expansion, modification, operation, or activity of the installation will not discharge, emit, or cause pollution in contravention of Department standards or rules. . . ." Rule 17-4.070(3) [Standards of Issuing or Denying Permits; Issuance; Denial] states, "The Department may issue any permit with specific conditions necessary to provide reasonable assurance that Department rules can be met. The 5 ppmv limitation on TRS emissions is a Department rule specifically applicable to TRS incinerators. The pound per hour and ton per year limitation on mass emissions from the TRS Incinerator (AC 54-142291) is necessary to limit the potential of the TRS Incinerator (AC 54-142291) to emit TRS and provide reasonable assurance that the standards in Rule 17-2.500 [PSD] will be met. In addition the limitation on the mass and concentration of TRS emissions from the TRS Incinerator (AC 54-142291) is necessary to assure that the operation of this source will not result in emissions contrary to the provisions of Rules 17-2.200 [Statement of Intent], and 17-2.620(2) [Objectionable Odor Prohibited].

Standards Applied To Other Incinerators
And/Or Condensate Strippers

With regard to the list of those who operate incinerators and/or condensate strippers that are not subject to mass emission limitations except for PSD purposes, we note that none of the sources are located in Florida. The statutes, rules, policies, and concerns of the State Of Florida are not precisely the same as those of other states. As a result of these differences, the Department is not under any obligation to implement the policies of other states, interpret its regulations in the same manner as other states, or copy the permits of other states.

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Emission Limitations Applied To
Other Existing Systems In Florida

The permittee states, "No other system in Florida permitted to comply with the existing source rule has emission limits except for PSD purposes." This statement is not factual. Neither the permits issued to Georgia-Pacific nor those issued to other mills for digester, evaporator, and/or condensate stripper systems contain mass emission limitations applicable to the individual systems--if the systems are vented to a combustion source for incineration. But, to the best of my knowledge, each of the permits for the combustion sources that are used to incinerate TRS gases from digester, evaporator, and/or condensate stripper systems contain mass emission limitations on emissions of TRS and other pollutants. Furthermore, the mass emission limitations that are applicable to the combustion sources are not restricted solely to the purposes of PSD.

Additional evidence of our intent and consistency with other permits is the last statement of Specific Condition No. 2, which applies solely to the non-NSPS Batch Digester System (AC 54-142282), non-NSPS Multiple Effect Evaporation System (AC 54-142283), and the NSPS Condensate Stripper System (AC 54-142288) states, "Actual mass emissions from each system shall be determined prior to and after any future changes, meaning those changes to the permitted systems not specifically authorized by these permits." Specific Condition No. 3 then places specific emission limitations on the TRS Incinerator (AC 54-142291).

Explanation Of Specific Condition No. 8

The permittee has apparently misinterpreted the requirements of Specific Condition No. 8 to be an emission limitation for the incinerator. This is not the case. Specific Condition No. 8 states, "All TRS gases burned in the TRS incinerator shall be subjected to a minimum temperature of at least 1200°F for at least 0.5 second. A device to continuously monitor and record combustion temperature at the point of incineration shall be installed pursuant to all applicable requirements of 40 CFR 60.284(b)(1)."

The first sentence of the specific condition is merely intended to reiterate the federal requirement that the combined gases from the non-NSPS Batch Digester System (AC 54-142282), non-NSPS Multiple Effect Evaporation System

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Explanation Of SC 8--Cont'd.

(AC 54-142283), and the NSPS Condensate Stripper System (AC 54-142288) are to be subjected to the temperature and retention time requirements of 40 CFR 60.283(a)(1)(iii) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Total Reduced Sulfur (TRS)-Digester System, Brown Stock Washer System, Multiple Effect Evaporator System, Condensate Stripper System].

The second sentence of the specific condition merely implements the requirements of 40 CFR 60.284(b)(1) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Monitoring of Emissions and Operations-Incinerators]. 40 CFR 60.284(b)(1) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Monitoring of Emissions and Operations-Incinerators] states, "For any incinerator, a monitoring device which measures and records the combustion temperature at the point of incineration of effluent gases which are emitted from any digester system, brown stock washer system, multiple effect evaporator system, black liquor oxidation system or condensate stripper system where the provisions of 40 CFR 60.283(a)(1)(iii) apply. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 percent of the temperature being measured."(emphasis added) The opening prepositional phrase, "From any incinerator," serves to make it clear that the requirement to monitor the temperature which the gases from any regulated NSPS system are subjected to applies to any incinerator--regardless of whether that incinerator is subject to other regulatory requirements, such as an emission limiting standard. Further, it is clear from the emphasized language that 40 CFR 60.284(b)(1) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Monitoring of Emissions and Operations-Incinerators] does not establish an emission limiting standard for incinerators. 40 CFR 60.284(b)(1) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Monitoring of Emissions and Operations-Incinerators] merely establishes a requirement that can be used to monitor whether gases from affected digester, evaporator, and condensate stripper systems are being subjected to the temperatures required pursuant to 40 CFR 60.283(a)(1)(iii) [Subpart BB-Standards of Performance for Kraft Pulp Mills-Total Reduced Sulfur (TRS)-Digester System, Brown Stock Washer System, Multiple Effect Evaporator System, Condensate Stripper System].

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Explanation Of Specific Condition No. 14

This specific condition is not germane to the issues addressed in this memo and was not addressed in the company's letter of October 4, 1989. But, for the record Specific Condition No. 14 requires Georgia-Pacific to submit certain test results to the Department by June 11, 1989, in order for the Multiple Effect Evaporation System (AC 54-142283) to retain the existing source (non-NSPS) designation. The reference to the Multiple Effect Evaporation System (AC 54-142283) as a non-NSPS system in this memo is not intended to imply that the Department still considers the system to retain the existing source designation. If the required testing was not submitted then the system is subject to the NSPS. However, that designation has no bearing on the conclusions in this memorandum.

cc: Gary Smallridge



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Clair Fancy

FROM: Mike Harley *W. K. H.*

DATE: November 30, 1989

SUBJ: Construction Permit Amendments for Georgia-Pacific Corporation Construction Permits: AC 54-142282, AC 54-142283, AC 54-142288, and AC 54-142291

We have proposed to approve most of the amendments requested by the permittee, but the request to delete Specific Condition No. 3 is being denied. Specific Condition No. 3 has been applied in a manner that is consistent with the intent of the authors of the Florida TRS regulations and TRS 111(d) Plan.

The company's request was based on a misinterpretation of the language in Florida's TRS regulations and an apparent misunderstanding of the above referenced permits. Specific Condition No. 2 of the above referenced permits requires the company to incinerate the emissions from the non-NSPS digester system (AC 54-142282), non-NSPS multiple effect evaporator system (AC 54-142283), and the NSPS condensate stripper system (AC 54-142288). The gases from these sources are incinerated in a specially constructed TRS incinerator. Specific Condition No. 3 of the above referenced permits places quantitative restrictions on the TRS emissions from the TRS incinerator (AC 54-142291). The company felt that Specific Condition No. 3 should be deleted because the incinerator treated the TRS emissions from the digesters, evaporators, and condensate stripper systems pursuant to the time and temperature criteria in the federal NSPS regulations.

The company overlooked the fact that the time and temperature criteria in the federal NSPS regulations are applicable to the TRS gases emitted by NSPS digester, evaporator, and condensate stripper systems. The time and temperature criteria are not

TO: Clair Fancy
DATE: November 30, 1989
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intended to be a TRS emission limiting standard applicable to TRS incinerators. The federal regulations do not contain a specific emission limiting standard for TRS incinerators. But, Florida's TRS regulations do contain a specific TRS emission limiting standard that is applicable to all TRS incinerators.

At the time of TRS Rule adoption, the Department also amended the existing language of its NSPS Rule to make it clear that TRS 111(d) emission limits could be applied to any source for which there was not a specific TRS emission limit in the federal regulations. One stated reason for the amendment [TRS 111(d) Plan-May 25, 1985] was to prevent the avoidance of the TRS emission limiting standard for TRS incinerators by claiming compliance with the temperature and retention time criteria applicable to gases from NSPS digester, multiple effect evaporator, and condensate stripper systems.

The mass TRS emissions from the TRS incinerator are limited pursuant to requirements of the PSD rules that apply to all permits issued by the Department, the reasonable assurance requirements of the rules for issuing or denying permits, and federal guidance. The application of the mass TRS emissions limitation to the TRS Incinerator is entirely consistent with the Department's application of TRS mass emission limitations to the sources that other Florida mills used to incinerate TRS, specifically lime kilns and a power boiler.

cc: Gary Smallridge

TO: Dale Twachtmann

FROM: Steve Smallwood

DATE: December 6, 1989

SUBJ: Approval of Construction Permit Amendments for
 Georgia-Pacific Corporation Construction Permits:
 AC 54-142282, AC 54-142283, AC 54-142288,
 and AC 54-142291

Attached for your approval and signature is a letter prepared by the Bureau of Air Regulation that will amend the construction permits for the non-NSPS batch digester system, the non-NSPS multiple effect evaporator system, the NSPS condensate stripper system, and the TRS incinerator. The amendments will make some minor changes to some of the specific conditions to reflect the sources as finally constructed. We are granting most of the amendments requested by the applicant, but the request to delete Specific Condition No. 3 is being denied. Specific Condition No. 3 has been applied in a manner that is consistent with the intent of the authors of the Florida TRS regulations and TRS 111(d) Plan.

I recommend your approval and signature.

SS/mdh

attachments

December 6, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Henry Hirschman
General Manager
Georgia-Pacific Corporation
P. O. Box 919
Palatka, Florida 32078-0919

RE: Construction Permits Numbers AC 54-142282, AC 54-142283, AC 54-142288, AC 54-142291 for the Batch Digester System, the Multiple Effect Evaporation System, the Condensate Stripper System, and the TRS Incinerator, Respectively

The Department has reviewed Georgia-Pacific's October 4, 1989, request for changes to the specific conditions contained in the above referenced permits. It is our decision that Specific Condition No. 3 which contains the TRS emission limiting standard applicable to the TRS incinerator AC 54-142291 will stand as written. We will interpret the last sentence of that condition to prohibit odorous emissions sufficient to result in verifiable, valid, and legitimate objectionable odor complaints at or beyond the property line. The Department will allow the intervals between mass particulate emission tests to be as long as five years, pursuant to your request. The compliance test frequency for all other pollutants including visible emissions of particulate remains as originally written in Specific Condition No. 13. Specific Conditions Nos. 4, 6, 7, and 11 are amended as follow:

Specific Condition No. 4:

From: Particulate emissions from the TRS incinerator shall not exceed 0.08 grain/dry standard cubic foot corrected to 50% excess air. Particulate emissions from the TRS incinerator shall exceed neither 2.44 lbs/hour nor 10.69 tons/year. Particulate emissions shall be determined by EPA Methods 1, 2, 3, and 5.

To: Particulate emissions from the TRS incinerator (AC 54-142291) shall be limited as follows:

Mr. Henry Hirschman
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December 6, 1989

a. Visible emissions from the TRS incinerator (AC 54-142291) shall not exceed 5% opacity (no visible emissions) except that visible emissions of up to 20% opacity are allowed for not more than three minutes in any one hour. Visible emissions from the TRS incinerator shall be determined using DER Method 9.

b. Mass particulate emissions from the TRS incinerator (AC 54-142291) shall neither exceed 5.5 lbs/hour nor 24.1 tons/year as measured by EPA Methods 1, 2, 3, and 5. Testing for compliance with the mass particulate emission limitation shall be exempt from the compliance testing schedule applicable to the other regulated pollutants emitted by the TRS incinerator. Instead, testing for compliance with the mass particulate emission limitation shall be completed not later than May 12, 1989, and subsequent testing shall be conducted at intervals of not longer than every 5 years thereafter, unless shorter testing intervals are ordered by the Department.

Specific Condition No. 6.c.:

From: The maximum operation rate of the condensate stripper (AC 54-142288) shall exceed neither 681 lbs of methanol/hour nor a 24-hour average of 446 lbs of methanol/hour. The maximum 24-hour operation rate is based on the nominal input of 45,181 lbs of pre-evaporator effect condensate/hour; 20,016 lbs of turpentine condensate/hour; 6,520 lbs of miscellaneous source condensate/hour; and, 16,200 lbs of steam/hour.

To: The maximum operation rate of the condensate stripper (AC 54-142288) shall neither exceed an input rate of 220 gallons of condensate/minute (109,500 lbs/hr) nor a 24-hour average of 180 gallons of condensate/minute (89,700 lbs/hr).

Specific Condition No. 7:

From: The following hourly operation rate and fuel input rates to the TRS incinerator (AC 54-142291) shall not be exceeded. The maximum hourly inputs of fuels shall be continuously monitored and recorded.

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- a. The total maximum hourly heat input due to methanol and natural gas either singularly or in combination shall not exceed 8.0 million Btu/hr.
- b. Natural gas with a sulfur content not to exceed 0.1% by weight may be used during periods of startup, shutdown, and malfunction providing the maximum hourly quantity does not exceed 7,620 cubic feet (60°F and 14.7 psia)/hour. Natural gas may also be used as a supplemental fuel and the total heat input due to all fuels does not exceed that allowed by specific condition No. 7.a.
- c. Methanol with a sulfur content not to exceed 0.001% by weight may be used providing the maximum hourly quantity does not exceed 124 gallons/hour and the total heat input due to all fuels does not exceed that allowed by specific condition No. 7.a.

To: The maximum hourly operation rate of the TRS incinerator (AC 54-142291) shall not exceed a total heat input rate due to fuel (methanol and natural gas) of 8.0 million Btu/hour. Natural gas with a sulfur content not to exceed 0.1% may be used during periods of startup, shutdown, and malfunction providing the maximum hourly quantity does not exceed 7,620 cubic feet (60°F and 14.7 psia)/hour. Natural gas may also be used as a supplemental fuel. The permittee shall monitor and record the hourly natural gas input rate.

Specific Condition No. 11:

From: All continuous monitoring and recording systems shall be regularly calibrated and maintained pursuant to written procedures and schedules recommended by the instrument manufacturer.

To: All monitoring and recording systems shall be regularly calibrated and maintained pursuant to written procedures and schedules in accordance with applicable regulations and accepted industry practice.

Mr. Henry Hirschman
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Attachments to be Added:

13. H. Hirschman's letter to C. Fancy, dated October 4, 1989, and received October 6, 1989.
14. V. Adams' letter (FAX) to M. Harley dated November 27, 1989, and received November 27, 1989.

This letter shall be attached to the construction permits, AC 54-142282, AC 54-142283, AC 54-142288, and AC 54-142291, and shall become a part of these permits.

Sincerely,

Dale Twachtmann
Secretary

DT/mdh

cc: A. Kutyna, NE District
D. Buff, P.E.
V. Adams
T. Cole