



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STEET
ATLANTA, GEORGIA 30303-8960

December 23, 1999

4APT-ARB

Dwight K. Wylie, P.E., Chief
Air Division
Office of Pollution Control
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, Mississippi 39289-0385

SUBJ: EPA's Review of Proposed Title V Permit No. 2780-00015
International Paper - Vicksburg Mill

Dear Mr. Wylie:

The purpose of this letter is to notify the Mississippi Department of Environmental Quality (MDEQ) that the U.S. Environmental Protection Agency (EPA) formally objects to the issuance of the above referenced proposed title V operating permit for the International Paper, Vicksburg Mill, in Warren County, Mississippi, which was received by EPA as a draft/proposed permit on October 8, 1999. This letter also provides our general comments on the proposed permit.

Based on EPA's review of the proposed permit, the supporting information received for this facility, and the responses provided by MDEQ to EPA's initial comments on the draft/proposed title V permit, EPA objects, under the authority of Section 505(b) of the Clean Air Act ("the Act") and 40 C.F.R. 70.8(c) (see also Mississippi Regulation APC-S-6, Section V, C and D), to the issuance of the proposed title V permit for this facility. The basis for EPA's objection is that the permit does not assure compliance with all applicable requirements as required by 40 C.F.R. 70.1(b) and 40 C.F.R. 70.6(a)(1). Specifically, the permit does not fully meet the periodic monitoring requirements of 40 C.F.R. 70.6(a)(3)(i), does not adequately address the averaging time requirements for the emissions standards to be practicably enforceable, and fails to reference the origin of and authority for each term and condition of the permit, as required by 40 C.F.R. 70.6(a)(1)(i). Pursuant to 40 C.F.R. 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. part 70 and assure compliance with applicable requirements of the Clean Air Act. The enclosure also contains general comments applicable to the permit.

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or the requirements of 40 C.F.R. Part 70. Section 70.8(c)(4) of the title V regulations and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA, and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be resolved prior to the expiration of the 90-day period.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief, Operating Source Section at (404) 562-9141. Should your staff need additional information, they may contact Ms. Gracy R. Danois, Environmental Engineer, at (404) 562-9119 or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,

/s/

Winston A. Smith
Director
Air, Pesticides & Toxics
Management Division

Enclosure

cc: F. Brad Biggar, Mill Manager
International Paper
D. McLeod, MDEQ (via e:mail)
D. Chandler, MDEQ (via e:mail)

Enclosure

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
International Paper - Vicksburg Mill
Permit no. 2780-00015

The State of Mississippi provided responses to EPA's initial comments in a letter dated December 15, 1999. Where applicable, EPA's responses to issues raised by the State are provided.

I. EPA Objection Issues

1. **Periodic Monitoring:** The permit does not require periodic monitoring to ensure compliance with the applicable opacity standard. The permit for International Paper is silent regarding how the facility will demonstrate compliance with this requirement for any of the units and what the facility will use as basis for a credible certification of compliance with the opacity standard. If the State believes that no monitoring is adequate for this standard, it must provide a technical demonstration in the statement of basis identifying the rationale for not requiring testing for opacity. Otherwise, the permit must be revised to identify the monitoring that will be conducted in order to ensure compliance with the opacity standard.

2. **Periodic Monitoring:** The permit does not contain adequate periodic monitoring for the majority of the emission limits contained in this permit. Although MDEQ incorporated in the permit additional monitoring for units with control equipment, the periodic monitoring scheme proposed in the permit is not sufficient to provide a reasonable assurance of compliance with emission limits for many of these units. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, periodic monitoring provides the source with an indication of their emission unit's performance so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, the permit needs to include a periodic monitoring scheme that will provide data which is representative of the source's actual performance. If the State believes that the periodic monitoring requirements of the proposed permit are appropriate, supporting data must be provided in the statement of basis to justify the State's periodic monitoring position. The following paragraphs describe, unit by unit, EPA's assessment of the periodic monitoring requirements that have not been adequately addressed in the permit and the potential fixes for the deficiencies:

- a. Unit AA-003, Lime Kiln - As a result of EPA's initial comments on the permit, MDEQ added a requirement to monitor the following parameters for this unit once per month: scrubber flow, pressure differential, scrubber pH, and oxygen content of the flue gas. EPA believes that these parameters should be monitored on, at least, a daily basis. Moreover, the permit must specify the procedure used to establish the parameter ranges that would be representative of proper operation of the control equipment and the frequency for re-evaluating the ranges.

Also, the permit does not specify any testing, recordkeeping and monitoring requirements for VOC. If the State believes that no monitoring is necessary for this pollutant, it must provide a technical demonstration in the statement of basis identifying the rationale for not requiring testing for VOC. Otherwise, the permit must be revised to identify the monitoring that will be conducted in order to ensure compliance with the VOC limit.

- b. Unit AA-005, Recovery Boiler and Unit AA-006, Power Boiler - As a result of EPA's initial comments on the permit, MDEQ added the following monitoring requirement: 1) for the recovery boiler - daily records of precipitator milli-amps and oxygen content of the flue gas; 2) for the power boiler - daily records of scrubber flow, pressure differential, and oxygen content of the flue gas, and pH once per 8-hr shift. However, the permit fails to specify the procedure used to establish the appropriate parameter ranges that would be representative of proper operation of the control equipment and the frequency for re-evaluating the ranges.

Also, the permit does not specify any testing, recordkeeping and monitoring requirements for VOC for these units. If the State believes that no monitoring is necessary for this pollutant, it must provide a technical demonstration in the statement of basis identifying the rationale for not requiring testing for VOC. Otherwise, the permit must be revised to identify the monitoring that will be conducted in order to ensure compliance with the VOC limit.

EPA believes that continuous emissions monitors (CEMs) should be used to assure compliance with the NO_x requirements contained in the permit for these units. Region 4 inquired nationwide whether similar facilities employed the use of CEMs to assure compliance with these requirements and found several examples where pulp and paper mill recovery and power boilers employ the use of CEMs as the periodic monitoring option for NO_x. Furthermore, similar units in power plants across the country are required to operate CEMs to measure the same pollutant as part of the periodic monitoring requirements for the units.

Regarding the use of CEMs for NO_x monitoring, the document. Periodic Monitoring Options for Several Kraft Pulp Mill Sources and Power Boilers by Arun V. Someshwar, National Council for Air and Stream Improvement

(NCASI), describes how no true surrogate parameter exists for monitoring NO_x emissions for recovery and power boilers. For recovery boilers, the document suggests that stack testing and black liquor nitrogen testing may be used to provide assurance of compliance. For power boilers, the document suggests that, aside from using CEM, the only option would be to establish a correlation between the excess O₂ and the NO_x formation rate. If the State chooses to impose any option aside from using a CEM as periodic monitoring for these units, the statement of basis must contain data that supports the validity of such periodic monitoring scheme. Another alternative found in the examples that EPA obtained was to perform testing using EPA method 7, 7A or 7B on a quarterly or a semi-annual basis.

- c. Units 010 and 011, Package Boilers - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable standard for NO_x, CO and VOC. The only requirement for these boilers is to maintain fuel usage records. Although we recognize the fact that these boilers operate using natural gas, it has not been demonstrated that maintaining fuel usage records alone will constitute the basis for a credible certification of compliance with the applicable NO_x, CO and VOC standards. If the State believes that no additional monitoring is warranted to ensure compliance with the applicable standards, it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on fuel usage records. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the applicable NO_x, CO and VOC standards for these units.
 - d. Unit 021, Crude Tall Oil Plant - The permit application states that this unit has a packed column scrubber. Condition 5.B.33 of the permit states that "regular maintenance shall be performed each month or more often if necessary" to ensure proper operation of the control equipment. This alone does not constitute adequate periodic monitoring for this unit. For the scrubber, parametric monitoring must be added that will provide reasonable assurance of compliance with the TRS limit for this unit. The State may want to use the information contained in the NCASI Periodic Monitoring Options for Several Kraft Pulp Mill Sources and Power Boilers document as basis for establishing such monitoring. Additionally, the permit must specify the procedure used to establish the appropriate parameter ranges that would be representative of proper operation of the control equipment and the frequency for reevaluating the changes. Regarding VOC, if the State believes that no monitoring is necessary for this pollutant, it must provide a technical demonstration in the statement of basis identifying the rationale for not requiring testing for VOC. Otherwise, the permit must be revised to identify the monitoring that will be conducted in order to ensure compliance with the VOC limit.
3. Appropriate Averaging Times: In order for the emissions standards to be practicably enforceable, the appropriate averaging time must be specified in the permit. One

approach that can be used to address this deficiency is to include general language in the permit to indicate that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance. MDEQ added a statement to this effect in condition 5.A.6 of the permit. However, since test methods typically do not specify either averaging or run times, the language used by the State does not address this issue. We suggest that the State consider using the language proposed above.

4. Regulatory Citations: As described in 40 C.F.R. 70.6(a)(1)(i), the permit shall specify and reference the origin of and authority for each term and condition. The State has acknowledged the importance of this requirement by including the following statement in the statement of basis for the proposed permit: "Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of APC-S-6 or the applicable requirement upon which is based." However, Section 5 of the permit, Monitoring, Recordkeeping & Reporting Requirements, fails to contain regulatory citations for many of the requirements with the exception of the requirements from 40 C.F.R. Part 63, subpart S. The permit must include the regulatory citations for all the monitoring, recordkeeping and reporting requirements included in Section 5.

The preamble to the final Part 70 rule offers the following explanation for the importance of this requirement: "... Including in the permit the legal citations to the provisions of the Act is critical in defining the scope of any permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. This requirement is satisfied by citation to the State regulations or statutes which make up the SIP or implement a delegated program." (57 FR 140, page 32276, July 21, 1992)

II. General Comments

1. General Comment: Note that our opportunity for review and comment on the International Paper permit does not prevent EPA from taking enforcement action for issues that have not been raised in these comments. After final issuance, this permit may be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.
2. Statement of Basis: The permit application for this source identifies two 110 MMBTU/hr package boilers that appear to be subject to the requirements of 40 C.F.R. Part 60, subpart Db. However, these two boilers do not appear to be identified in the permit. In addition, no applicable requirements could be located in the permit conditions that were associated to these units. In its response to EPA's comments, the State indicated that the facility submitted a letter requesting that the boilers be removed from the permit because they would not be in service. The statement of

basis for the permit should contain this information to avoid any potential misunderstandings that may arise at a later date regarding these units.

3. Page 14: Verify that the primary and secondary low pressure feeders referred to on page 1 of Appendix B, Construction Permit Application, dated February 1999, are the ones identified as emission unit AA-031 of the permit.
4. Page 18: Add the temperature requirement contained in condition 3.B.21 to the requirements for unit AA-006.
5. Page 20: Clarify condition 3.B.1. so that it clearly directs the permittee to the table to find applicable limits.
6. Page 21: Clarify condition 3.B.8 so that it clearly states that the power boiler is considered an alternate control device.
7. Page 22: Condition 3.B.10 of the permit establishes that the facility is required to demonstrate initial and continuous compliance with the requirements of 40 C.F.R. 63.446(c)(3) based on a 15-day rolling average compliance period. In order to allow the facility to use the averaging time as basis for the compliance demonstration, the source must submit a demonstration to the State about the adequacy of the averaging time. Neither the permit nor the statement of basis explain whether this was already done by the source. (Refer to the Nov. 5, 1999, letter from Winston A. Smith to Ronald W. Gore for a more detailed discussion on the selection of the appropriate averaging time.) In the response to comments, MDEQ indicated that statement regarding the averaging time would be removed from the permit, but the revised permit still contains the statement. Since the establishment of the averaging time is essential to demonstrating compliance with the applicable requirements in 40 CFR Part 63, Subpart S, rather than removing the averaging time from the permit, confirm whether this approval process was completed.
8. Page 22: Condition 3.B.10 refers to unit AA-027, Turpentine Condenser. Clarify whether this unit is the same as the one identified as Turpentine Decanter Underflow on page 3, item 5 of Appendix B, Construction Permit Application, dated February 1999.
9. Page 22: MDEQ should consider adding the requirements of 40 C.F.R. 63.446(d)(1) to condition 3.B.10.
10. Page 22: Condition 3.B.12 of the permit should state the emission units that will discharge condensates to the biological treatment unit.
11. Page 27: Condition 5.A.6 specifies that the facility shall use EPA test methods to demonstrate compliance with emission monitoring requirements. However, it would be more accurate to specify that the facility shall use EPA Air test methods to avoid any misinterpretations of this condition.

12. Page 28: Conditions 5.B.4. and 5.B.5. need to specify what type of records (e.g. lb/hr) the facility must maintain to assure compliance with the requirements contained in these conditions.
13. Page 30: Based on the information contained in the permit application and the applicability section of 40 C.F.R. Part 60, Subpart Dc, it appears that the temporary package boilers are subject to the requirements of Subpart Dc. Therefore, condition 5.B.15 should specify that International Paper must comply with the listed fuel monitoring recordkeeping requirement. In addition, because the heat input of these boilers is 99 MMBTU/hr, the State may want to require additional monitoring to ensure that these units do not exceed 100 MMBTU/hr of heat input. If they do exceed the heat input limitation, these boiler would be subject to subpart Db. Please refer to the Nov.6, 1987, letter provided to you with EPA's initial comments, for more information regarding this comment.
14. Page 30: For consistency, condition 5.B.16 should be moved to Section 3 where all the emission and operation limits and are included.
15. Page 38: Refer to general comment 13. The same applies to condition 5.C.3 and 5.C.4.