



Seminole Kraft Corporation

Jacksonville Mill

9469 Eastport Road
P.O. Box 26998
Jacksonville, Florida 32218-0998

September 9, 1989

904 751-6400

RECEIVED

SEP 11 1989

DER-BAQM

Mr. Clair H. Fancy
Deputy Bureau Chief
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Seminole Kraft Recovery Boiler PSD Application

Dear Mr. Fancy:

This is a follow up to our meeting to discuss our application for the new recovery boiler and associated facilities at our mill in Jacksonville. Your staff requested we set out certain additional information in writing to make our application complete and this letter is for that purpose.

First, there have been no other contemporaneous changes in emissions at the Jacksonville mill over the last five years other than those noted for the No.3 lime slaker on Table 4-4 in the application.

Secondly, there have been no emission test for SO₂, NO_x, or VOC's conducted on the recovery boilers or smelt dissolving tank vents. That is why emission factors were used for those sources in the application.

Thirdly, based on further consideration of the proposed SO₂ emissions for the new recovery boiler on the above referenced application, Seminole Kraft is modifying its proposed annual average SO₂ emissions. The revised annual average SO₂ emissions is 339.3 lbs/hr and 1,486 tons/year (TPY). This revision is based upon an annual average SO₂ concentration of 120 ppmvd @ 8% O₂.

Updated Tables 3-1 and 4-4 of the permit application are attached which reflect this change. As shown on Table 4-4, the net increase in SO₂ emissions resulting from the project is 6.4 TPY.



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This level is still below the PSD significant emission rate of 40 TPY for SO₂ and, therefore, PSD review does not apply for SO₂. Because this change in annual average SO₂ emissions from that indicated in the original application is so small (9%), this change will not significantly affect the annual average SO₂ modeling results presented in Section 5.0 of the application. There will still be a significant reduction in ambient annual average SO₂ levels as a result of the project.

The information presented in these updated tables is the most current information for the new recovery boiler and smelt dissolving tank. AES Cedar Bay will soon submit Amendment 3 to their power plant site certification package which will include the same information for the recovery boiler and smelt dissolving tank. Therefore the information on these sources will be the same in both applications.

Fourthly, there will be no net emissions increase in TRS or SO₂ from the lime kilns as a result of this project as the new set of evaporators will have the same black liquor solid input rate as the existing evaporators.

Finally, as indicated at our meeting, the new recovery boiler will be equipped with continuous emission monitors for opacity and total reduced sulfur as required by the new source performance standards. These CEM systems will meet all NSPS requirements.

We believe this information should allow the department to find our application complete. Please contact us if you have any questions.

Sincerely,



L.A. Stanley
General Manager

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attachments

CC: Mike Riddle
Curt Barton
Terry Cole
Pradeep Ravel

Ernest Frey, FDER Northeast District
Jim Manning, BESD
Ron Roberson, BESD

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W. A. [unclear]

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Table 3-1. Maximum Emissions from Proposed Recovery Boiler and Smelt Dissolving Tank

| Pollutant | New Recovery Boiler | | | New Smelt Dissolving Tank | | | Total (TPY) |
|----------------------------|---|-------------------|---------------|------------------------------------|-------|------|-------------|
| | Basis | lb/hr | TPY | Basis | lb/hr | TPY | |
| Particulate Matter (TSP) | 0.044 gr/dscf @ 8% O ₂ | 107.0 | 468.7 | 0.2 lb/ton BLS | 17.1 | 74.9 | 543.6 |
| Particulate Matter (PM10) | 74.8% of PM(TSP) | 80.8 | 350.6 | 89.5% of PM(TSP) | 15.3 | 67.0 | 417.6 |
| Sulfur Dioxide | 180 ppmvd @ 8% O ₂ , max. 110 ppmvd @ 8% O ₂ , annual average | 514.0 339.3 | -- 1,486.0 | 0.2 lb/ton ADUP and 80% removal | 2.28 | 10.0 | 1,496.0 |
| Nitrogen Oxides | 180 ppmvd @ 8% O ₂ | 369.3 | 1,617.5 | -- | -- | -- | 1,617.5 |
| Carbon Monoxide | 400 ppmvd @ 8% O ₂ | 494.8 | 2,167.2 | -- | -- | -- | 2,167.2 |
| Volatile Organic Compounds | 80 ppmvd @ 8% O ₂ | 56.6 | 247.9 | -- | -- | -- | 247.9 |
| Total Reduced Sulfur | 5 ppmvd @ 8% O ₂ ⁺ | 7.51 ⁺ | 32.9 | 0.032 lb/ton BLS | 2.73 | 12.0 | 44.9 |
| Lead | 3,900 lb/10 ¹² dscf | 0.047 | 0.21 | -- | -- | -- | 0.21 |
| Mercury | non-detectable | -- | -- | -- | -- | -- | -- |
| Beryllium | 300 lb/10 ¹² dscf | 0.0036 | 0.016 | -- | -- | -- | 0.016 |
| Sulfuric Acid Mist | 0.81 ppm actual | 3.0 | 13.3 | -- | -- | -- | 13.3 |
| Inorganic Arsenic | non-detectable | -- | -- | -- | -- | -- | -- |
| Fluorides | -- | -- | -- | -- | -- | -- | -- |
| Asbestos | -- | -- | -- | -- | -- | -- | -- |
| Vinyl Chloride | -- | -- | -- | -- | -- | -- | -- |

+ Maximum 12-hour emissions.

Table 4-4. PSD Source Applicability Summary

| Regulated Pollutant | Previous Contemporaneous Emissions Reductions (TPY) | Reduction Due to Existing Recovery Boilers and Smelt Tanks (TPY) | Increase Due to New Recovery Boiler and Smelt Tank (TPY) | Net Increase in Emissions (TPY) | PSD Significant Emission (TPY) | PSD Review Applies? |
|----------------------------|---|--|--|---------------------------------|--------------------------------|---------------------|
| Particulate Matter (TSP) | 134.5 | 549.8 | 543.6 | -140.7 | 25 | No |
| Particulate Matter (PM10) | 126.0 | 430.2 | 417.6 | -138.6 | 15 | No |
| Sulfur Dioxide | -- | 1,489.6 | 1,496.0 | 6.4 | 40 | No |
| Nitrogen Oxides | -- | 321.1 | 1,617.5 | 1,296.4 | 40 | Yes |
| Carbon Monoxide | -- | 2,327.2 | 2,167.2 | -160.0 | 100 | No |
| Volatile Organic Compounds | -- | 340.2 | 247.9 | -92.3 | 40 | No |
| Total Reduced Sulfur | -- | 98.2 | 44.9 | -53.3 | 10 | No |
| Lead | -- | 0.37 | 0.21 | -0.16 | 0.5 | No |
| Mercury | -- | -- | -- | -- | 0.1 | No |
| Beryllium | -- | 0.028 | 0.016 | -0.012 | 0.004 | No |
| Sulfuric Acid Mist | -- | 19.1 | 13.3 | -5.8 | 7 | No |
| Inorganic Arsenic | -- | -- | -- | -- | 0 | No |
| Fluorides | -- | -- | -- | -- | 3 | No |
| Asbestos | -- | -- | -- | -- | 0.007 | No |
| Vinyl Chloride | -- | -- | -- | -- | 1 | No |

Note: TPY = tons per year.