February 7, 2006

Mr. J. Robert Brown
Engineering Services Division
Bureau of Air Quality
2600 Bull Street
Columbia, South Carolina 29201

Re: Bowater Coated and Specialty Papers Division
PSD Permit Application for Kraft Fiberline Optimization
No. 3 Recovery Furnace Proposed LAER Emission Limit for NO_X
Permit No. 2440-0005

Dear Mr. Brown:

Bowater Coated and Specialty Papers Division (Bowater) has prepared the attached additional information regarding the proposed LAER emission limit for NO_X from the No. 3 Recovery Furnace as you requested.

DHEC request:
Provide additional justification for the proposed 78 ppm LAER emission limit for NO_X from the No. 3 recovery furnace.

Bowater response:
The proposed LAER emission limit for the No. 3 recovery furnace is 78 ppm at 8% O_2. This emission limit is based on the highest one-hour test run from compliance testing, and is lower than the vendor guaranteed emission limit of 80 ppm at 8% O_2. Bowater has also proposed installing a continuous emission monitor (CEM) for NO_X to assure continuous compliance with the LAER emission limit.

The RBLC contains two Alabama determinations from 1989 (AL-0042) and 1990 (AL-0047) with 75 ppm BACT emission limits for NO_X. The 1989 determination is for a new recovery furnace with a capacity of 2,090 tons black liquor solids (TBLS) per day. A review of the PSD preliminary determination for this furnace (AL-0042) does not indicate the basis of the 75 ppm emission limit. However, common practice for new equipment is to base the emission limit on the performance guarantee from the vendor.

The 1990 determination (AL-0047) is also for a new recovery furnace with a capacity of 2,750 TBLS per day. A review of the PSD preliminary determination for this furnace states the 75 ppm BACT emission limit was based on the lowest BACT limit in Alabama (1989 limit from determination AL-0042).

The Bowater No. 3 recovery furnace was built in 1983, and modified in September 2003. As a result of the September 2003 modification, the capacity of the No. 3 recovery furnace was

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increased to 1,774 TBLS per day, which is still substantially below the capacity of both new furnaces with 75 ppm BACT emission limits. The BACT emission limit established for the 2003 modification of the No. 3 recovery furnace is 80 ppm.

The currently proposed modifications to the No. 3 recovery furnace will increase capacity to 2,040 TBLS per day, which is comparable to the new furnace permitted in 1989. However, the No. 3 recovery furnace required two major modifications (2003 and proposed 2006) to achieve this capacity, whereas the 1989 furnace (AL-0042) was originally designed with this capacity. Similarly, the modified No. 3 recovery furnace capacity (2,040 TBLS per day) will still remain well below the 1990 original design capacity of 2,750 TBLS per day for the 1990 furnace (AL-0047).

Bowater completed modifying the No. 3 recovery furnace on September 4, 2003. Source tests performed prior to September 4, 2003 do not reflect the current operations and should be excluded from further evaluation of LAER limits. A summary of compliance testing since September 2003 is shown below:

Test Date	Production Rate	Percent of Capacity	Average	Run 1	Run 2	Run 3
12/2/03	1,765	99.5	69	53	76	78
8/4/04	1,630	91.9	59	58	59	61
8/3/05	1,725	97.2	66	66	67	64

Since the September 2003 modification, Bowater has performed three source tests on the No. 3 recovery furnace. NO_X testing was performed on December 2, 2003, at a production rate of 1,765 tons of black liquid solids per day, or 99.5% of the permitted production capacity. Since the December 3, 2003, source test was performed at capacity, results from this source test are most representative of future emissions at the higher production rate. NO_X emissions from the December 2003 test indicated an average emission of 69 ppmv at 8% O_2.

A closer examination of the December 2, 2003, test results shows the average NO_X emission rate was based upon three test runs of 53 ppmv, 76 ppmv, and 78 ppmv at 8% O_2. Since this test is most representative of future emissions following the proposed modifications, Bowater would be out of compliance with a 75 ppm LAER emission limit 67 percent of the operating time. Based on all nine test runs since the September 2003 modification, Bowater would exceed a 75 ppm LAER emission limit more than 20 percent of the operating time. Bowater does not consider an emission limit exceeded more than 20% of the operating time as “achievable”.

The two Alabama BACT emission limits of 75 ppm at 8% O_2 are also expressed in more traditional units of pounds per hour. On an annual basis, the 1989 BACT limit of 75 ppm is equivalent to 745 tons per year, and the 1990 BACT limit of 75 ppm correlates to 742 tons per year. The proposed 78 ppm LAER limit for the No. 3 recovery furnace represents annual emissions of 618 tons per year; a reduction of approximately 125 tons of NO_X per year from either of these previous BACT determinations.

Bowater does not believe the emissions from a new unit and modified unit of the same capacity are directly comparable. The modification of an existing source must incorporate the physical and operational limitations of the existing equipment, while a new unit may be designed for a target emission level prior to installation.

Bowater objects to a 75 ppm LAER emission limit for NO_X when historical test data demonstrates the No. 3 recovery furnace is not currently capable of achieving 75 ppm on a continuous basis. Bowater proposes a 78 ppm LAER emission limit for NO_X from the No. 3 recovery furnace, which is below the vendor guarantee of 80 ppm, but historical testing has indicated is capable of being achieved.

If you have additional questions regarding this submittal please contact Jacquelyn Taylor of Bowater at (864) 981-8759, or me at (864) 527-4734.

Sincerely,

Steven R. Moore
URS Corporation

cc: Jacquelyn Taylor – Bowater