



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 15 2003

OFFICE OF
AIR AND RADIATION

Sheryl S. Raulston
Environmental Affairs Manager
International Paper
P.O. Box 178
Franklin, VA 23851-0178

Re: Petition for a Default F-factor for International Paper (Facility ID (ORISPL) 52152), Unit 003 at the Franklin, Virginia Facility

Dear Ms. Raulston:

This is in response to your May 23, 2003 petition under §75.66(a) in which International Paper (International) requested permission to use a default F-factor of 1,830 scf/10⁶ Btu when coal and wood are co-fired in Unit 003 at the Franklin, Virginia paper mill. EPA approves the petition, for the reasons discussed below.

Background

International Paper owns and operates a power boiler, Unit 003, located at its Franklin, Virginia facility. The boiler is an affected unit in the NO_x Budget Program under 9 VAC 5 Chapter 140 and is required to monitor and report NO_x mass emissions and heat input in accordance with Subpart H of 40 CFR Part 75, beginning on May 1, 2003.

Unit 003 combusts coal and wood. Most of the time, the two fuels are co-fired, although, according to International, the unit is occasionally operated on coal alone. As represented in the electronic monitoring plan for Unit 003, International plans to use Equation F-26 to calculate the hourly NO_x mass emissions and Equation F-15 to quantify hourly unit heat input. A carbon-based "F-factor" appears in Equation F-15, but not in Equation F-26. Therefore, the value of the F-factor affects the unit heat input, but has no effect on NO_x mass emissions.

The carbon-based F-factors (i.e., "F_c" values) for coal and wood waste listed in Table 1 in section 3.3.5 of Appendix F to Part 75 are very similar. The F_c value for coal is 1,800 scf/10⁶ Btu and the value for wood is 1,830 scf/10⁶ Btu. Sections 3.3.6.3 and 3.3.6.4 of Appendix F specify that for units combusting a combination of fossil fuels (e.g., coal, oil, etc.) and non-fossil fuels (e.g., bark, wood residue, etc.), the F-factor should be prorated according to the fraction of the total heat input derived from each fuel, and the F_c value is subject to the Administrator's approval.

In the May 23, 2003 petition, International requested permission from EPA to use the F_c value for wood, i.e., 1,830 scf/10⁶ Btu, whenever wood and coal are co-fired in Unit 003, rather than prorating the F-factor as described in section 3.3.6.4 of Appendix F.

EPA's Determination

EPA approves International's petition to use an F_c value of 1,830 scf/10⁶ Btu when coal and wood are co-fired in Unit 003, for the following reasons. First, the F_c value has no effect on the reported NO_x mass emissions for Unit 003. Second, the F_c values for coal and wood are nearly the same, differing by less than 2 percent. Therefore, using a default F_c value of 1,830 scf/10⁶ Btu for co-fired hours should not introduce any significant error in the calculation of hourly unit heat input. Third, the default F_c value of 1,830 scf/10⁶ Btu is conservatively high, which, according to Equation F-15, will most likely result in a slight underestimation of unit heat input during periods of co-firing. If future NO_x emission credits (i.e., allowances) for Unit 003 are allocated on the basis of historical unit heat input, underestimation of the heat input will ensure that the unit does not receive more than the appropriate number of NO_x allowances.

EPA's determination relies on the accuracy and completeness of the information provided by International in the May 23, 2003 petition and is appealable under Part 78. If you have any questions or concerns about this matter, please contact Robert Vollaro of my staff at (202) 564-9116. Thank you for your continued cooperation.

Sincerely,



Sam Napolitano, Acting Director
Clean Air Markets Division

cc: Renee McLaughlin, EPA Region III
Bonnie Steinmann, Virginia DEQ
Robert Vollaro, EPA, CAMD