

TO: AL LINERO/JOHN REYNOLDS

AT MTS. AT CF INDUST'S 2/22/00

THIS TRANSMITTAL WAS EPA'S RESPONSE TO MY QUESTION TODAY AS TO WHETHER BACT WOULD BE APPLIED TO

facsimile  
TRANSMITTAL

to: Jerry Kissel - FDEP  
fax #: (813) 744-6458  
re: Debottlenecking and BACT  
date: February 22, 2000  
pages: (including this cover sheet)

Attached is the documentation on BACT for debottlenecked units. I sent this documentation to Joe Kahn last December. It consists of one-page request from EPA Region 10 and a three-page response from OAQPS. Although this material is rather old (1983), it's the best that I could find.

→ DOWNSTREAM UNITS, WHICH HAVE BEEN UNMODIFIED,  
JIM LITTLE ALSO MENTIONED IN A TELECON  
THIS MORNING THAT IT'S EPA'S VIEW AT  
REGION IV, THAT BACT WOULD NOT BE  
APPLIED. FLORIDA'S RULES MAY VARY A BIT  
FROM EPA'S, & MORE INPUT CAN BE FOUND ON FLA'S RULES  
IN THE CARGILL CASE 0570008-024 AC/PSD FL-247,  
TECHNICAL EVALUATION 9/21/83, PARTICULARLY PAGE 10.

J. Kissel

MEETING ATTENDEES

From ...

AL LINERO, DEP  
JOHN REYNOLDS, DEP  
MIKE MESSINA, CF  
BOB MAY, CF  
RANDY CHARLOTTE, CF  
NOEL MORERA, EPC  
JERRY KISSEL, DEP

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C: CF INDUSTRIES, MIKE MESSINA  
EPC, NOEL MORERA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 10, Seattle, Washington 98101

DATE: JUL 6 1983

SUBJECT: PSD Applicability

FROM: Michael M. Johnston, Chief  
Air Operations Section

TO: Mike Trutna, Chief  
New Source Review Office

A pulp and paper company is in the process of transferring the mill to a new owner. The new owner is proposing to install a bleaching plant and a larger digester to accommodate market demand for bleached pulp. While the construction of these units do not by itself cause increased emissions, emission from the recovery boiler as a result of this construction activity will increase above the significant levels, but remain below the maximum design permit limits. The company contends that PSD is triggered only if the net emissions increase from the specific modifications alone exceeds the threshold levels thereby releasing the project from review.

Region 10 has interpreted the term "net emissions increase" as any significant increase in actual emissions from a physical change or change in the method of operation at a stationary source. In this case, do we look at emissions from the specific modifications themselves or do we look at the overall change in actual emissions from the entire facility? The recovery boiler throughput was limited due to the size of the digester. Although the recovery boiler can accommodate the larger digester, we feel that the physical change and change in method of operation constitutes a modification.

If you have any questions please feel free to contact me or Ray Nye of my staff at (FTS) 399-7154.

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

JUL 28 1983

OFFICE OF  
AIR, NOISE AND RADIATION

SUBJECT: PSD Applicability Pulp and Paper Mill

FROM: Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Michael M. Johnston, Chief  
Air Operations Section - Region X

Your request dated July 6, 1983, to Mike Trutna concerning a PSD applicability issue has been forwarded to my office for response. Your request concerns a pulp and paper company that is proposing to install a bleaching plant and a larger digester. While the construction of these units does not by itself cause increased emissions, emissions from the recovery boiler as a result of this construction activity will increase above the significance levels, but remain below the maximum design permit levels. Your question, is whether this a major modification under the PSD requirements.

The PSD rules at 40 CFR 52.21 (b) (2) define major modifications as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." Net emissions increase is defined as:

"the amount by which the sum of the following exceeds zero: Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."

Major modifications are, therefore, determined by examining changes in actual emission levels. Actual emissions are defined as:

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"the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with sub-paragraph (ii)-(iv) below

- (ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the units actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.
- (iii) The Administrator may presume that source specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (iv) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date."

Since this source has been in operation for some time, subparagraph (iv) does not apply. Your memo indicates that the recovery boiler is subject to a permit limit. Ray Nye of your staff has informed my staff that this permit limit binds the recovery boiler to a level of 0.1 gr/dscf, but does not provide any discussion on the unit's operating rate. The recovery boiler has operated in the past at a rate of 450 tons/day, consistent with existing digester capacity. Although the regulations provide a presumption for the use of allowable emissions when source specific limits are established, the preamble at 45 FR 52718 (August 19, 1980) states that:

"The presumption that Federally enforceable source specific requirements correctly reflect actual operating conditions should be rejected by EPA or a State, if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or permit."

Therefore, since the recovery boiler could not have operated at a level higher than that provided by the existing digester capacity, any increase in actual emissions at the recovery boiler which will result from the increased capacity provided by the larger digester must be considered for the purposes of PSD applicability.

Once it is determined whether there is a significant net emissions increase (summing the emission increases from the larger digester, new bleaching plant and the increased operation of the recovery boiler) in conjunction with any contemporaneous emission increases and decreases, the PSD requirements should be applied, including BACT and air quality analyses. The regulations at 40 CFR 52.21(j)(3) require that:

"A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit."

Since the recovery boiler itself will not be undergoing a physical change or change in the method of operation, it will not have to apply BACT. However, all emissions increases must undergo air quality analysis and will consume applicable air quality increments.

This response has been prepared with the concurrence of OGC and CPDD. Should you have any questions concerning it, please contact Rich Biondi at 382-2831.

Edward E. Reich

cc: Mike Trutna  
Peter Wyckoff  
Dave Rochlin