

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: November 24, 1986

SUBJECT: Need for a Short-term Best Available Control Technology (BACT)
Analysis for the Proposed William A. Zimmer Power Plant

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

TO: David Kee, Director
Air Management Division, Region V (5AR-26)

This is in response to your November 17, 1986, memorandum, in which you requested comment on Region V's belief that prevention of significant deterioration (PSD) permits must contain short-term emission limits to ensure protection of the applicable national ambient air quality standards (NAAQS) and PSD increments. I concur with your position and emphasize to you that this position reflects our current national policy. Consequently, I recommend that you continue to identify this apparent deficiency to the Ohio Environmental Protection Agency and seek correction of the draft permit for the William A. Zimmer Power Plant.

The PSD regulations clearly require that the application of BACT conform with any applicable standard of performance under 40 CFR Part 60 at a minimum. However, this should not be taken to supercede any additional limitations as needed to enable the source to demonstrate compliance with the NAAQS and PSD increments. In the case of sulfur dioxide (SO₂), source compliance with the 30-day rolling average emission limit under subpart D(a) does not adequately demonstrate compliance with the short-term NAAQS and PSD increments. Consequently, enforceable limits pertaining to the performance of the flue gas desulfurization system on a short-term basis must also be established. Note, however, that the short-term limits can result from either BACT analyses or the need to protect air quality. Therefore, the short-term limit could be more stringent than the BACT limit.

I recognize that the sulfur variability issue tends to complicate the setting of short-term SO₂ emission limits, but such limits must be defined nevertheless. Continuous emission monitoring data from comparable sources can be used in order to estimate worst-case short-term SO₂ emissions that could occur at the plant. The modeling techniques used to determine compliance with the short-term NAAQS and increments should employ the enforceable short-term SO₂ emission limits which the permitting agency establishes.

CPDD:SIB:NSRS:D.deroech:m.Whitt629-5591:rtp MD15:11/19/86 deRoeck 5-29-3

From David Kee			Control No CPDD-427
Subject and Date Request for Guidance on Short Term BACT Analysis			Date Rec'd 11-18-86
			Due Date 11-21-86
Referred (1) McCutchen	(2) DeRoeck	(3)	(4)
Date 11-18-86	11-18-86		
Reply Sent To			Date Released
Remarks Easy response -- Agree with Region 5; if disagree, see Darryl. Prepare reply for Gerald A. Emison's signature.			Acknowledged-Date <input type="checkbox"/>
			No Answer Needed <input type="checkbox"/> (Explain in emarks)

MAIL CONTROL SCHEDULE

To: G.EMISON (EPA6200)

FROM: ARB/REG.V (EPA9553) (Posted) Mon 17-Nov-86 10:44 EST Sys 63 (39)

SUBJECT: Request for Guidance on Short-Term BACT Analysis
Request for Guidance on Short-Term BACT Analysis

David Kee, Director
Air Management Division (5AR-26)

Gerald A. Emison, Director
Office of Air Quality Planning & Standards

Region V has recently completed an evaluation of Ohio EPA's draft permit for the William A. Zimmer Power Station Plant. Compliance with all pertinent Clean Air Act requirements, including Best Available Control Technology (BACT) requirements, was evaluated. During the course of these evaluations, a potentially significant problem arose in dealing with this fossil-fueled power plant employing flue gas desulfurization (FGD). Ohio's SO₂ BACT analyses and emissions limits appear to have been based solely on a 30-day rolling average, an approach consistent with Subpart D(a) provisions for fossil fuel fired steam electric generating units. Region V is concerned that no emission limits based on 3-hr or 24-hr averaging periods have been included in Ohio's draft permit. The Region believes that short-term limits are necessary to ensure protection of the NAAQS and to adequately assess and protect increment consumption.

Accordingly, Region V has expressed its concerns to Ohio about the potential need for the SO₂ BACT analysis to consider the performance of FGD systems on a short-term basis (i.e., 3-hr and/or 24-hr). Region V has also indicated that such short-term limits are necessary to protect the NAAQS and PSD increments. Region V would appreciate your guidance, concurrence or comments on the BACT analysis issue. Since Region V and Ohio will be discussing the need for a short-term BACT analysis and emission limits within ten (10) days, a prompt response is important. If you have any questions regarding this matter, please contact Joseph Paisie of my staff at 886-5777.