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BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:	)	
Pennsauken County, New Jersey Recovery Facility	)	PSD Appeal No. 88-8 Resource

REMAND ORDER

In separate petitions filed pursuant to 40 CFR 124.19 (1987), the Township of Cinnaminson et al. and Robert Filipczak requested review of a Prevention of Significant Deterioration (PSD) permit issued to the Pennsauken Solid Waste Management Authority for construction of a municipal waste combustor. The permit determination was made by the New Jersey Department of Environmental Protection (NJDEP) pursuant to a delegation of authority from EPA Region II, New York, New York. Because of the delegation, NJDEP's permit determination is subject to the review provisions of 40 CFR 124.19, and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR 124.41; 45 Fed. Reg. 33,413 (May 19, 1980).

Under the rules governing this proceeding, there is no appeal as of right from the permit decision. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Region level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioners.

Discussion

Cinnaminson et al. object to issuance of the permit because they believe NJDEP's determination of best available control technology (BACT) is deficient. According to these petitioners, NJDEP did not give adequate consideration to thermal de-NOx

technology in performing the BACT analysis. Petitioners argue that NJDEP's determination not to set an emission limitation

based on thermal de-NOx technology was based on an inadequate record, resulting in part from NJDEP having made its BACT determination prior to the time of permit issuance. Petitioners also argue that the BACT analysis submitted by the permit applicant did not adequately justify use of combustion controls (the means chosen by the applicant for controlling NOx emissions from the proposed facility) instead of thermal de-NOx technology. NJDEP responded to these contentions by arguing that the record actually discloses that the BACT determination was made at the time of permit issuance; that the permit applicants' BACT evaluation fully evaluates alternative control technologies, including thermal de-NOx technology; and that thermal de-NOx technology is not yet "available" within the meaning of the statutory definition of BACT. Regarding the last point, NJDEP stated that there was just one facility in the United States (the Commerce facility in Whittier, California) employing thermal de-NOx technology, and that it had been in operation only one year; that there is just one facility currently under construction (in Modesto, California); and that a third (in Long Beach, California) began operations after the Pennsauken permit was issued and therefore could not have been considered at the time of permit issuance. With respect to these facilities, NJDEP says they were reviewed

under legal standards and NOx control strategies not pertinent to the Pennsauken facility.

An examination of the materials identified by NJDEP as representing the NOx BACT analysis generally bears out petitioners' contention that the BACT analysis on which NJDEP relied is inadequate. Specifically, the record fails to disclose that the applicant met its burden of showing that an emission limitation based on combustion controls alone represents BACT. The basic attributes of that burden are set out in Honolulu Resource Recovery Facility ("H-Power"), PSD Appeal No. 86-8 (June 22, 1987), where I interpreted the statutory definition of BACT as placing the burden on the applicant of "demonstrating that signi-

ficant technical defects, or substantial local economic, energy, or environmental factors or other costs warrant a control technology less efficient than [the most stringent available technology]." Id. at 7, 6 n.9. This interpretation was disseminated in operational guidance for municipal waste combustors on June 26, 1987, and was further refined in general guidance issued by EPA's Assistant Administrator for Air and Radiation on December 1, 1987. The latter guidance refers to the applicant's burden as the "top-down" approach to BACT analysis:

> The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case.
>
> The "top-down" approach is essentially required for municipal waste combustors pursuant to the June 22, 1987,

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Administrator's remand to Region IX of the H-Power BACT decision and the OAQPS June 26, 1987, "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWC's)." It is also currently being successfully implemented by many permitting agencies and some of the

Regional Offices for all sources. I have therefore determined it should be adopted across the board.

The H-Power decision, the operational guidance for municipal waste combustors, and the "top-down" guidance are all applicable to the Pennsauken permit determination. H-Power was my direct administrative interpretation of the statutory BACT requirement; the subsequent operational guidance and "top-down" guidance implement H-Power through statements of Agency policy. All three documents antedate issuance of the permit. These

interpretations and policy statements were therefore available to the applicant and NJDEP for the Pennsauken permit.

The permit applicant's burden of showing that a more stringent technology is not BACT obviously does not come into existence unless the so-called "more stringent" technology is available. If the technology is not available, the permit applicant is under no duty to consider it in the BACT analysis. Here, NJDEP contends that thermal de-NOx technology is not available; however, there is nothing of substance in the applicant's BACT analysis to bear out this contention. If anything, it is

refuted by reference to the Commerce facility, which was in existence and operating during NJDEP's review of the permit application, and by reference to the evident willingness of the Modesto and Long Beach applicants to commence construction of their municipal waste combustors during the same period of consideration. The fact that these projects were undertaken to comply with allegedly different legal requirements (LAER or California rules) and different control strategies is not especially material to the issue of availability. The question of availability for purposes of BACT is a practical, factual determination, using conventional notions of whether the technology can be put into use. The record here raises a strong presumption in favor of concluding that thermal de-NOx technology is available in the sense just described. The operational guidance, issued June 26, 1987, also treats thermal de-NOx technology as an available technology that "should be considered by permitting authorities in making BACT determinations." Operational Guidance at 6. In short, the applicant's BACT analysis must evaluate thermal de-NOx as an available technology.

The applicant's BACT analysis, however, does not contain the level of detail and analysis necessary to satisfy the applicant's

burden, as previously described, of showing that thermal de-NOx technology is technically or economically unachievable for this source. The applicant's assertions that the technology has not yet been demonstrated to be efficient, reliable, and cost effective in controlling NOx are merely conclusory. Moreover, they were made in a January 1987 submission and are undoubtedly out-of-date in view of the rapid developments in the application of this technology. Although the BACT analysis shows control costs in the range of $1300-1500 per ton of NOx removed, there is no serious discussion of cost effectiveness. For example, the applicant estimated annual costs of removing NOx at $200,000 to

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$250,000 using thermal de-NOx technology. FEHIS (Response to Comments) at 212 (Table 16.1-1). However, there is no discussion that even purports to show that these costs are unusually high. Greater efforts must be made by the applicant to show that thermal de-NOx is economically infeasible or otherwise not achievable in this case. This might be done, for example, by

obtaining and analyzing operating data and other information from the Commerce facility -- and perhaps also from the Long Beach facility, which recently commenced operations. H-Power and EPA's guidance implementing that decision contemplate a much more thorough explanation, based on consideration of objective technical and economic data, to substantiate the contention that thermal de-NOx is an experimental, unproven technology. In sum, the BACT analysis does not contain sufficient justification, specific to the proposed facility, to justify the level of control proposed in the permit. More detail and analysis is required.

Petitioner Robert Filipczak's fundamental objections to the Pennsauken permit are not with the control technology, but rather, with the municipal waste combustor itself. He urges rejection of the combustor in favor of co-firing a mixture of 20% refuse derived fuel and 80% coal at existing power plants. These objections are beyond the scope of this proceeding and therefore are not reviewable under 40 CFR 124.19, which restricts review to "conditions" in the permit. Permit conditions are imposed for the purpose of ensuring that the proposed source of pollutant emissions -- here, a municipal waste combustor -- uses emission control systems that represent BACT, thereby reducing the emissions to the maximum degree possible. These control systems, as stated in the definition of BACT, may require application of "production processes and available methods, systems, and techniques, including fuel cleaning as treatment or innovative

fuel combustion techniques" to control the emissions. 42 U.S.C.A. 7479(3). The permit conditions that define these systems are imposed on the source as the applicant has defined it. Although imposition of the conditions may, among other things, have a profound effect on the viability of the proposed facility as conceived by the applicant, the conditions themselves are not intended to redefine the source, as petitioner Filipczak would have them do. In other words, the source itself is not a condition of the permit. Therefore, petitioner's objections to the permit are not within the scope of this proceeding. Other matters raised by petitioner that are arguably within the scope of the proceeding, for example, the adequacy of the BACT analysis as it relates to mercury emissions and removal of metals as a fuel cleaning procedure, have not been presented in a manner to convince me that NJDEP committed clear error or that an important issue warranting review has been raised at this time. Therefore, the petition is denied.

Conclusion

The deficiencies in the BACT analysis leave two courses of action open at this juncture of the proceedings. One is to grant review of the permit and enter into the briefing phase contemplated by 40 CFR 124.19(c). However, the deficiencies in the record can not be rectified through the submission of briefs and any ensuing decision would likely conclude that the permit should be denied (because of the deficiencies) or that it should be remanded to the permit-issuing authority to allow the ap-

plicant to supplement the BACT analysis. Considerations of time favor remanding the permit in the first instance. Therefore,

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rather than receiving additional briefs on appeal, I am remanding the case to NJDEP for further consideration of the BACT analysis, solely as it relates to NOx emissions. This remand should not be viewed as prejudging the issue. NJDEP is simply directed to reopen the permit proceeding for the limited purpose of allowing the applicant to supplement its original BACT analysis in accordance with the guidance described in this decision. If, after a full review of the data NJDEP determines that NOx emission levels obtained from combustion controls alone represent BACT, it may reissue the permit as written. It may, of course, revise the limitations and other conditions of the permit as appropriate.

After making the determination, NJDEP should reopen the public comment period to receive any supplemental comments from petitioners Cinnaminson et al. on the issue of the NOx limitations in the permit. NJDEP's determination on remand will be subject to review under 40 CFR 124.19, and appeal of its decision on remand will be required to exhaust administrative remedies under section 124.19(f)(1)(iii).

So ordered.

Dated: November 10, 1988

Lee M. Thomas
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order on Petitions for Review in the matter of Pennsauken County, New Jersey, Resource Recovery Facility, PSD Appeal no. 88-8, was mail

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Dated: November 10, 1988

Brenda H. Selden, Secretary
to the Chief Judicial Officer

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