

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460  
MAY 21 1992

OFFICE OF  
GENERAL COUNSEL

MEMORANDUM

SUBJECT: Recent Administrative and Judicial Decisions Regarding  
Consideration of Source Separation in Determining Best Available control  
Technology Under PSD

Citizens for Clean Air v. EPA, No. 90-70119 (9th Cir., March 26, 1992)

Brooklyn Navy Yard, PSD Permit Appeal No. 88-10 (Remand Order, February  
28, 1992)

FROM: Jeffrey B. Renton, Attorney  
Air and Radiation Division, LE-132A

Gregory B. Foote  
Assistant General Counsel  
Air and Radiation Division, LE-132A

TO: William G. Rosenberg  
Assistant Administrator for Air and Radiation, ANR-443

THRU: Alan W. Eckert  
Associate General Counsel  
Air and Radiation Division, LE-132A

The purpose of this memorandum is to advise you of two recent developments regarding the issue of source separation under the Clean Air Act's prevention of significant deterioration (PSD) program.

On March 26, 1992, the United States Court of Appeals for the Ninth Circuit affirmed two decisions by the Administrator denying appeal of a PSD permit for the Spokane, Washington municipal waste combustor (MWC). Citizens for Clean Air v. U.S. EPA, No. 90-70-119 (9th Cir., March 26, 1992) (copy attached). In the challenged decisions, the Administrator upheld the refusal of the Washington Department of Ecology (Ecology), acting as EPA's delegate, to consider materials separation as part of the best available control technology (BACT) analysis for the Spokane incinerator. See Spokane Regional Waste-to-Energy, PSD Appeal No. 88-12 (Order Denying Review, June 9, 1989) (Spokane I), and Spokane Waste-to-Energy Project,

PSD Appeal No. 89-4 (Order Denying Review of Revised Permit Determination, January 2, 1990) (Spokane II).

However, the Spokane decisions and their affirmation in *Citizens for Clean Air* have been largely superseded as to materials separation issues by a more recent PSD permit appeal decision. See *Brooklyn Navy Yard*, PSD Appeal No. 88-10 (Remand Order, February 28, 1992) (copy attached). In *Brooklyn Navy Yard*, the Administrator followed the reasoning set forth in EPA's final new source performance standards (NSPS) for MWCS, as well as other developments since the Spokane permit was issued, finding that source separation for NO<sub>x</sub> is now an available control technology for PSD purposes. Hence, he remanded the permit and ordered EPA Region II to consider source separation in determining BACT for NO<sub>x</sub>.

As a result of *Brooklyn Navy Yard*, PSD permit applicants should consider source separation, in combination with more conventional control technologies, in their BACT analyses for any proposed MWC. Of course, the permitting authority retains discretion whether to finally require any particular level of separation (or none at all) after considering source-specific energy, environmental, and economic impacts, and other costs.

Attached is a more in-depth discussion of the main issues addressed in the above cases.

#### Attachments

cc: Raymond B. Ludwiszewski, LE-130  
Michael Shapiro, ANR-443  
Rob Brenner, ANR-443  
John Seitz, ANR-443  
Gerald Kotas, PM-222B  
Lydia Wegman, OAQPS (MD-10)  
John Calcagni, OAQPS (MD-15)  
Air Division Directors, Regions I-X  
Regional Counsel Air Team Leaders, Regions I-X

## DISCUSSION

### Summary of the Spokane Case

In Spokane I, the Administrator found that Ecology had not committed clear error in failing to consider source separation in combination with other pollution control technologies as part of the BACT analysis.[See footnote 1] The Administrator reasoned that the petitioners (local citizens groups) had failed to produce "hard data" demonstrating that materials separation in combination with other controls would have a significant beneficial impact upon emissions. Although the citizens groups had provided some evidence for their "common sense" conclusion that less garbage burned means less pollution, the referenced studies were inapposite as they did not adequately address materials separation when used in combination with other controls. Nevertheless, the permit was remanded on other grounds, for the limited purpose of implementing an agreement to modify the BACT determination for NO<sub>x</sub> (to reflect use of thermal de-NO<sub>x</sub>, i.e., selective noncatalytic reduction, or an equivalent control technology). On subsequent appeal, in Spokane II, the Administrator refused to revisit the materials separation issue, noting the limited nature of the earlier remand.

Upon review in Citizens for Clean Air, the Ninth Circuit Court of Appeals held that the Administrator was not arbitrary, capricious or outside of his statutory right in allowing the permit to issue absent consideration of materials separation in the BACT analysis. The court credited the Administrator's concern at that point in time over the lack of "hard data," finding that its absence made "quantification" difficult for assessing the impact of materials separation in combination with "in the stack" pollution control technologies.[See footnote 2] Significantly,

---

Footnote 1. Washington (and approximately one-third of the other states) lacks an approved PSD program in its SIP. Thus, EPA's PSD regulations at 40 CFR 52.21 have been promulgated as a federal implementation plan in the State, see 40 CFR 52.2497, and EPA has delegated implementation of this program to Ecology under 40 CFR 52.21(u). Pursuant thereto, PSD permits issued by Ecology are federal permits subject to EPA's consolidated permit regulations at 40 CFR Part 124, including the appeal procedures in 40 CFR 124.19.

Footnote 2. Rather than endorsing EPA's statutory justification, the court instead focused on the procedural requirement that the permitting authority respond to "significant" comments. See 40 CFR 124.17(a)(2). In the court's view, Petitioners' lack of hard data rendered their comment not "significant." This reasoning is (continued...)

the court acknowledged the applicability of EPA's "top-down" guidance, finding that it would be difficult to rank technologies pursuant to that methodology in the absence of hard data or quantification.[See footnote 3]

Summary of the Brooklyn Navy Yard Case The recent PSD appeal decision by the Administrator in Brooklyn Navy Yard renders much of the Ninth Circuit opinion immaterial. In Brooklyn Navy Yard, the Administrator found that Region II erred in failing to consider materials separation in combination with conventional control technologies for nitrogen producing waster. He distinguished his Spokane decisions by noting (1) the more specific nature of materials separation issue raised here, (2) the Petitioner's provision of a more recent study, and (3) the fact that Region II required separation of NOx-producing wastes if necessary to meet the emissions limit, and thereby implicitly determined that "certain separation programs are likely to reduce NOx emissions." See Brooklyn Navy Yard at 13.

---

Footnote 2 (... continued)

somewhat curious because, in fact, Ecology did provide a written response to petitioners comments -- it rejected them. The court disregarded this sort of response, apparently interpreting 40 CFR 124.17(a)(2) as requiring that EPA "substantively" respond to a significant comment, i.e., consider materials separation as part of the BACT analysis. See Citizens for Clean Air, Slip Op. at 2996-99.

Footnote 3. Regarding the standard of review, the permitting regulations at 40 CFR 124.19 limited review by the Administrator to instances where important policy concerns are implicated or the permitting authority commits "clear error." (This review authority was recently transferred to the newly constituted Environmental Appeals Board. See 57 FR 5320 (Feb. 13, 1992).) In declining review in Spokane I and Spokane II, the Administrator held that Ecology did not clearly err; thus, EPA sought to have the court review only whether this determination was arbitrary or capricious. The court declined that approach, however, scrutinizing instead the totality of the permitting proceeding, including the decisions made by Ecology, under a "deferential" arbitrary and capricious standard. Citizens for Clean Air, Slip Op. at 2994-95. EPA should keep the court's reasoning on this point in mind in considering future permit appeals.

Also, relevant to the outcome in the Brooklyn Navy Yard case was the fact that, since the Spokane decisions, EPA issued final NSPS regulations for MWCs that embodied a policy decision to address source separation in the context of new or modified sources on a case-by-case basis through the PSD program. The NSPS rulemaking included a finding that materials separation "used in conjunction with good combustion practices, and add-on controls, will result in further reductions of emissions from MWC's," even though the Agency concluded at that time that "the amount of emissions reduction cannot be accurately predicted." Brooklyn Navy Yard at 12 (quoting NSPS proposal, 54 FR 52,251, 52,257, 52,281 (Dec. 20, 1989)). Although EPA did not require materials separation on a national basis in the final NSPS regulations, it determined that the issue "may continue to be raised on a case-by-case basis in individual BACT determinations under CAA section 169(3)." Id. at 13 (quoting final NSPS, 56 FR 5,496 n.4 (Feb. 11, 1991)).

#### "Downsizing" as a Consequence of Source Separation

In *Citizen for Clean Air*, the court rejected petitioner's "common sense" argument that less materials burned means less pollution under the circumstances of that case. Instead, it found persuasive EPA's rationale that when materials separation was called for in combination with in-the-stack controls, further reductions might not follow. Thus, since the citizens groups had failed to specify what materials would be removed and what pollutants reduced, the court found that EPA acted reasonably in upholding the permit. However, the Spokane case only addressed the question of whether source separation would reduce emissions per ton of waste burned. Neither the Administrator nor the court had occasion to address "downsizing" -- reducing the size of the facility and, hence, the amount of waste incinerated -- as a consequence of source separation.

Nevertheless, in the NSPS rulemaking, EPA pointed out that a source separation requirement would, in the aggregate, lead to less incineration, and smaller or fewer incinerators in many specific cases. (In other instances, source separation may result in an increased service area.) Although, as noted above, EPA was unable to quantify a specific amount of emissions reductions per ton burned as a result of source separation, it readily concluded that downsizing prompted by source separation would result in fewer total emissions.

The Brooklyn Navy Yard decision also addressed downsizing. The permit applicant argued that because nearly 80% of all waste charged by an MWC emits nitrogen when burned, NYPIRG was essentially requesting that the source be entirely redefined.

The Administrator did not agree, holding that the materials separation to be considered on remand fits within the statutory definition of fuel cleaning. This is because Region II remains vested with discretion to determine "an appropriate level of separation, if any, considering costs and other relevant factors." Brooklyn Navy Yard at 18.[See footnote 4] In the end, the Administrator made clear that his intent was neither to reconfigure the proposed facility, nor cause any significant change to its planned use. *Id.* at 20, n.7.[See footnote 5] Nevertheless, the Administrator emphasized that those contemplating future construction of MWCs might anticipate the need to consider source separation, and as a result may well "plan for construction of a smaller facility or to expand the MWC service area beyond what it might have been in the absence of source separation." *Id.* Although such a result would not be compelled, its possibility is consistent with the overall "air quality planning and pollution prevention purposes of the PSD program." *Id.* See CAA section

---

Footnote 4. The Administrator noted that appropriate cost-criteria include, on the one hand, the cost of collection, trucks, wages, and the overall cost-effectiveness of separation, and on the other hand, revenue from sales of recycled material, avoided trash collection expense, and air benefits. Brooklyn Navy Yard at 18-19.

Footnote 5. In the past, EPA has taken the position that the BACT analysis should not provide commenters or petitioners an opportunity to "redefine the source" by forcing the applicant to consider construction of a facility that is significantly different from the one proposed. See, e.g., Pennsauken Resource Recovery Facility, PSD Appeal No. 88-8 (Remand Order, Nov., 8, 1988) at 11. We note, however, that this position, while reasonable, is not compelled by the statute. PSD permitting authorities may, through the BACT provision or other aspects of PSD review, require construction of a significantly different source or even deny the application altogether. For example, in the 1990 Amendments, Congress revised the statutory definition of BACT in section 169(3) of the Act to require consideration of "clean fuels" as a pollution control technology. In addition, section 165(a)(2) provides that the public hearing held to consider a PSD permit must include an opportunity to make presentations on "alternatives" to the proposed source. Also, the legislative history of the 1977 Amendments asserts that Congress intended to give states broad flexibility to condition a PSD permit according to local desires, and may deny the permit if it could alter the character of the community. See S. Rep. No. 95-127, 95th Cong., 1st Sess. 31 (1977).

169(3) (definition of BACT contemplates use of "production processes and available materials, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques ...."); see also note 9, *supra*.

#### Affirmation of the Legality of EPA's Top-Down Policy

As noted above, in *Citizens for Clean Air*, the Ninth Circuit implicitly approved EPA's application of the top-down BACT policy. Although none of the parties or intervenors challenged the legitimacy of the top-down policy itself, the manner in which it was applied was at the heart of the case. In order to reach and ultimately uphold that application, the court reviewed the policy as the embodiment of EPA's interpretation of the statutory BACT definition. As such, the court's analysis serves to refute the criticism from some quarters that the top-down policy is inconsistent with the Clean Air Act.

The court observed initially that the PSD permit procedure "imposes different burdens on different parties at various stages of the process." *Citizens for Clean Air*, Slip Op. at 2992. The court then noted that in *Spokane I* the Administrator had concluded, relying on guidance memoranda, that the statute imposes a burden on the permit applicant to identify the "available" control technology that will produce the maximum degree of reduction of each regulated pollutant. The court further noted that under the top-down methodology, the applicant also has the burden of demonstrating that the "best" (i.e., most stringent available) technology is inappropriate under the statute. *Id.* at 2993 ("[t]he burden of identifying and applying [BACT] thus lay with Spokane during the proceedings before Ecology"). Thus, the court upheld EPA's view that a petitioner, and not the permit applicant, has the burden of demonstrating that a new and unproven (for BACT purposes) technology should be considered in the BACT analysis, and that EPA acted reasonably in rejecting the citizen groups' claims given the absence of an adequate quantitative showing regarding the effectiveness of source separation in conjunction with conventional state-of-the-art control technologies. *Id.* at 2992-3003. In the end, the court found no error in EPA's construction of the statutory BACT definition. *Id.* at 3003.

#### Quantification of Emissions Reductions from Source Separation

The court in *Citizens for Clean Air*, Slip Op. at 3000, stated that "the top-down ranking methodology for [BACT] requires some kind of quantification of effectiveness in order to rank technologies." This goes a step too far. As the Administrator plainly states in *Brooklyn Navy Yard*, under EPA's regulations for BACT, work practice standards may be substituted

for or combined with emissions standards if quantification proves difficult. Brooklyn Navy Yard at 19-20. Thus, while the court is correct that the top-down methodology requires enough information to rank effectiveness of different control alternatives, the Brooklyn Navy Yard decision makes clear EPA's position that precise quantification is not necessary in all circumstances. This reasoning would apply equally to any other analytical framework, including a "bottom-up" methodology, for addressing the core criteria of the BACT definition -- i.e., consideration of all available control technologies in determining the maximum degree of reduction achievable in light of source- specific energy, environmental, and economic impacts, and other costs.

#### Obligation to Consider Source Separation as an Available Control Technology in Future Decisions

As discussed above, in Brooklyn Navy Yard the Administrator determined that source separation is now an available control technology. See, e.g., pages 10, 14-15, 20 n.7. Although the decision does not explicitly mandate consideration of source separation in future permit proceedings, it strongly suggests that it would be desirable to do so. Moreover, by virtue of the iterative nature of the BACT development process, the decision effectively calls for consideration of source separation as part of the BACT determination process for all future MWCs needing PSD permits. That is, once a technology crosses the threshold of availability for BACT purposes it remains there, and, the need to consider it in subsequent permit proceedings flows directly from the logic of the BACT system. In addition, given the local controversy engendered by virtually every new MWC, it is reasonable to anticipate that local citizens groups will call upon future PSD applicants and permitting authorities to consider source separation. Thus, it follows that applications that do not reflect consideration of source separation run a significant risk of administrative and judicial appeals based on such failure.[See footnote 6]

---

Footnote 6. In states without SIP-approved PSD programs, appeals will be directed to EPA. Based on the nature of the issue and the pattern of past development of case law under 40 CFR 124.19, it seems likely that the Environmental Appeals Board would follow the precedent in Brooklyn Navy Yard and remand any permit that had not addressed source separation, provided the request is sufficiently specific and narrowly tailored. In states with approved PSD SIPS, applicants who fail to consider source separation would face the possibility of citizen challenges

(continued...)

For all of these reasons, the likelihood that source separation will ultimately have to be considered is high enough that prudent applicants likely will not contest the need to incorporate source separation into their BACT analyses. They probably will instead seek to minimize the impact of source separation procedurally, in terms of the time and effort needed to conduct the BACT analysis, and substantively, in terms of the stringency of any source separation/recycling requirements that might emerge in a final permit.

In the wake of the Administrator's decision in Brooklyn Navy Yard, EPA may want to consider whether to issue guidance to state and regional office permitting authorities. We would, of course, be happy to work with your staff in this regard.

---

Footnote 6 (...continued)

through state administrative and judicial channels, as well as the prospect of EPA enforcement action under Clean Air Act Sections 113 and 167.

Footnote 7. According to news articles, the Brooklyn project itself has been put on hold until 1996 by New York City Mayor David Dinkins. (Apparently, this deferral was driven by local political considerations, not EPA's Remand Order.)

FOR PUBLICATION  
UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

---

CITIZENS FOR CLEAN AIR  
COUNCIL FOR LAND CARE AND  
PLANNING,  
Petitioners,

v.

UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY,  
WASHINGTON DEPARTMENTS OF  
ECOLOGY, OPINION  
CITY OF SPOKANE,  
WHEELABRATOR SPOKANE,

No. 90-70119  
and PSD No.  
89-4

Respondents,  
and  
Inventors.

---

Petition to Review a Decision of the  
Environmental Protection Agency

Argued and Submitted  
November 9, 1990---Seattle, Washington

Filed March 26, 1992

Before: Thomas Tang, Diarmuid F. O'Scannlain and  
Edward Leavy, Circuit Judges.

Opinion by Judge Tang  
2981

---

SUMMARY

---

Environmental Law

The court of appeals denied a petition for judicial review of orders of the Environmental Protection Agency, holding that EPA approval of a municipality's plan to construct and operate a waste incinerator was not arbitrary or capricious for the agency's failure to consider recycling as a best available control technology where no hard evidence was presented to show the potential effectiveness of fuel cleaning and separation in combination with existing smoke-cleaning devices.

In 1984, the City of Spokane sought to obtain an EPA permit to construct and operate a mass burn incinerator that would convert refuse to marketable energy. The City filed an application with the state's Department of Ecology (Ecology) for a "prevention of significant deterioration of air quality" (PSD) permit, under the Clean Air Act. The City's plan included only limited provisions for removal of recyclable materials from the waste stream, relying instead on combustion and "in the stack" technologies to reduce air pollution. Petitioners, the Citizens for Clean Air and the Council for Land Care and Planning, objected because the proposal did not include recycling as a best available control technology (BACT) to reduce air pollution. Citizens supported its comments with three recycling studies. Ecology rejected consideration of recycling as a BACT and approved the permit Citizens appealed to the EPA Administrator, who issued an order denying review of the permit ("Spokane I"). In 1989, after permitting additional comments, Ecology issued revised final approval. Citizens petitioned the EPA Administrator for review, arguing that a revised standard for nitrogen oxide emissions was still too high because it did not account for reductions that would result from a more vigorous waste reduction and recycling program. The petition made reference to the pending proposed new EPA rule and also included a

study of a successful recycling program in Seattle. Again, the Administrator denied review ("Spokane II"), ruling that Citizens had failed to show that Ecology had committed clear error in refusing to consider recycling as a best available control technology. The administrator also dismissed as moot the contention regarding nitrogen oxide emissions, remanding to Ecology to set new pollutant standards, after Spokane agreed to install the necessary technology. Citizens petitioned the court of appeals for review of the Administrator's orders. Shortly after Spokane's 1987 permit application, the EPA proposed new rules for municipal waste combustors such as Spokane's. The EPA noted that common sense recycling is an appropriate technology for reduction of air pollution from incinerators and also noted the difficulty in quantifying emission reductions attributable to recycling. Final approval of this rule was still pending when Citizens petitioned the court of appeals for review.

[1] With respect to the Spokane I order, Citizens argued that the Administrator erred in holding Citizens to an especially heavy burden of providing hard data in support of recycling as a best available control technology for the incinerator.

[2] Once the PSD permitting process reaches the public comments stage, comments must be significant enough to step over a threshold requirement of materiality before any lack of agency response or consideration becomes of concern.

[3] After initial approval of a permit, the burden shifts to petitioners.

[4] The court applies the arbitrary or capricious standard of review.

[5] The EPA did not impose a new "heavy burden" requiring Citizens to produce hard data concerning recycling before EPA could be required to consider recycling as possible BACT.

[6] Citizens' argument failed to take into account that the burden of proof at the permitting stage rested on the permit applicant, not the EPA.

[7] Citizens contended that the Administrator erred in concluding that Citizens' comments on the PSD application were not significant enough to require Ecology either to request a response from the City or otherwise to consider recycling as a BACT.

[8] The Administrator found that recycling was such "uncharted territory" that Citizens did not show Ecology clearly erred in failing to evaluate it in detail.

[9] The Administrator's decision was not arbitrary or capricious.

[10] Citizens offered no hard evidence and did not refer to analogous technology that would quantitatively validate the effectiveness of its recycling proposals.

[11] Taken by itself, Citizens' common sense approach cannot stand on its own, once state-of-the-art technologies are considered. Here, Citizens did not set forth specific issues or evidence in support of its argument.

[12] None of the studies submitted by Citizens supported the proposition that a recycling requirement would reduce pollution beyond the reductions to be achieved by installing other technologies already required by the PSD permit.

[13] Citizens also contended that the Administrator erred in construing the term "available" to mean "quantifiably effective."

[14] Even if the Administrator erred, Citizens was not prejudiced. The Administrator's rationale applies with equal force to a "best" as well as to an "available" determination.

[15] Finally, Citizens argued that the EPA's proposed new performance standard for municipal incinerators relied on a study and common sense inferences rejected by the Administrator in denying Citizens' first petition.

[16] Given the distinction between the PSD program and the later statutory terms of the proposed rule, the Administrator did not act arbitrarily and capriciously in rejecting Citizens' petition.

[17] With respect to the Spokane II order, the Administrator should not have cited "repose" as a rationale for denying Citizens' second petition. However, Citizens offered nothing more specific on remand than it did during the initial comment period. The Administrator therefore did not act arbitrarily and capriciously in declining to reconsider recycling as a BACT.

CITIZENS FOR CLEAN AIR v. EPA 2985

---

---

COUNSEL

David A. Bricklin, Bricklin & Gendler, Seattle, Washington, for the petitioners.

Craig D. Galli, United States Department of Justice, Washington, D.C., for the respondent.

Laurie S. Halvorson, Assistant Attorney General, Olympia, Washington, (Washington Department of Ecology)(appeared only)

Craig S. Trueblood, Preston, Thorgrimson, Shidler, Gates & Ellis, Spokane, Washington, for intervenors-respondents, City of Spokane.

---

OPINION

TANG, Circuit Judge:

Citizens for Clean Air and the Council for Land Care and Planning ("Citizens") petition for judicial review of final orders of the Environmental Protection Agency ("EPA") denying Citizens' two petitions for administrative review. Citizens sought EPA review of a Washington Department of Ecology ("Ecology") permit for construction of a solid waste incinerator by the City of Spokane, Washington. The Clean Air Act, as amended, 42 U.S.C. Sections 7401-7671q, sets standards for the issuance of permits by state agencies such as Ecology. Citizens alleges that it was arbitrary and capricious for EPA to uphold the permit issued to Spokane. Citizens argues that EPA and Ecology failed to consider recycling as a "best available control technology" for air pollution as required by the Act. We deny Citizens' petition for judicial review.

## FACTUAL AND PROCEDURAL BACKGROUND

### A. The Planning Stage

In the early 1980s, Spokane began grappling with a shortage of safe landfill sites for city and county refuse. Contamination of the Spokane- Rathdrum aquifer forced the closure of three landfills, later designated as EPA "Superfund" sites. In 1981, Spokane initiated studies of landfill alternatives, including a mass burn incinerator which would convert refuse to marketable energy (a "waste-to-energy" incinerator). By 1984, after several more studies and public hearing, Spokane adopted a comprehensive plan for solid waste management.[See footnote 1] The comprehensive plan included plans for recycling, waste reduction, a waste-to-energy incinerator, and, as a last resort, a new regional landfill. The recycling program increased the Spokane County recycling rate from 5% of all waste produced in 1984 to 19% in 1990. The 1990 update of the comprehensive plan sets a recycling goal of 50% by 1995.

The incinerator aspect of the plan also proceeded. First, Spokane completed environmental impact statements required under Washington law. Next, in 1987, Spokane contracted with Wheelabrator Environmental Systems ("Wheelabrator") to design and build a waste-to-energy incinerator.[See footnote 2] Spokane also contracted with a power utility to buy the energy produced. Finally, in 1987, Spokane initiated the permitting process under the Clean Air Act.

---

Footnote 1. See "1984 Spokane County Comprehensive Solid Waste Management Plan Update," adopted pursuant to Washington State Solid Waste Management Act, Wash. Rev. Code ch. 70.95.

Footnote 2. Wheelabrator is an intervenor-respondent in this appeal.

## B. The Clean Air Act Permitting Stage

### 1. Statutory Framework

The Clean Air Act includes a scheme for the "prevention of significant deterioration of air quality," called the "PSD" program. See 42 U.S.C. Sections 7470-7492. The PSD program requires owners and operators to secure a permit before construction of certain new stationary sources of air pollution. *Id.* Section 7475. Spokane's proposed incinerator qualifies as a new source of air pollution regulated under the PSD program.

Three features of the PSD program figure in this review Of EPA decisions. First, all such new sources must meet "New Source Performance Standards," which impose various emissions limitations. *Id.* Section 7411(a), (f). EPA periodically promulgates New Source Performance Standards under its rulemaking authority. *Id.* Section 7411(b)(1)(B). Second, the PSD program requires all new source applicants such as Spokane to install the "best available control technology" ("BACT") to reduce air pollution. *Id.* Section 7475(a)(4). Determination of the best available control technology is made "on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs." *Id.* Section 7479(3). Third, EPA regulations for the PSD program require notice, a comment period, and a public hearing on applications for new sources of air pollution. See 40 C.F.R. Sections 124.10-124.12. Upon final approval of an application by a state agency, participants in the comment process may petition the EPA Administrator in Washington, D.C. for administrative review. *Id.*Section 124.19.

### 2. Spokane's Permit Application

Pursuant to 40 C.F.R. Sections 52.21(u), 52.2497(b), EPA has delegated administration of the PSD program in Washington to Ecology. On August 26, 1987, Spokane filed its PSD permit application with Ecology. Spokane proposed an incinerator designed to burn 800 tons of solid waste per day. The proposal included no provision for removal of recyclable materials

from the "waste stream" except for refrigerators and hazardous materials. The incinerator design instead included combustion and "in the stack" technologies' to reduce regulated air pollutants. Even with these technologies installed, Spokane's proposed incinerator will emit hundreds of tons of, regulated pollutants into the air each year.

During the comment period on Spokane's application, Citizens challenged the proposed PSD permit because the proposal failed to include recycling as a "best available control technology" to reduce air pollution. Citizens noted that recycling would reduce the volume of the waste stream and thereby necessarily reduce air pollution generated by bunting waste. Citizens further commented that recycling qualified as the best available control technology when "taking into account," as the Act requires, "energy, environmental, and economic impacts and other costs." 42 U.S.C. Section 7479(3). Citizens argued that recycling would minimize costs uniquely associated with mass burn incineration including revenue lost from recyclable materials; energy costs associated with manufacturing from virgin, as opposed to recycled[,] materials; environmental and other costs due to the mining of raw materials when recycled materials could be used instead; costs associated with disposal and handling of hazardous incinerator ash; soil, water, and plant contamination caused both by air pollution and by leachate from ash disposal sites; and cumulative effects such as acid rain and ozone depletion.

In support of its comments, Citizens filed three studies of recycling.

---

Footnote 3. "In the stack" technologies include scrubbers inside the emission stack, for example.

Ecology responded to Citizens' comments by rejecting consideration of recycling as a best available control technology for the Spokane incinerator. On December 13, 1988, Ecology issued final approval of the Spokane incinerator permit.

### C. The Administrative Appeals

#### 1. Spokane I: The First Appeal

In December 1988, Citizens appealed Ecology's approval of the Spokane incinerator to the EPA Administrator. Citizens argued that Ecology had erred in failing to consider recycling as a best available control technology. As a result, Citizens argued, Ecology planned to permit the incinerator to discharge more regulated pollutants than necessary. Further, Citizens challenged Ecology's failure to require "deNOx" control technologies to reduce nitrogen oxide emissions from the incinerator.

On June 9, 1989, the Administrator issued an order denying review of the Spokane permit. In re Spokane Regional Waste-to-Energy Applicant, PSD Appeal No. 88-12 (EPA June 9, 1989) ("Spokane I"). The Administrator ruled that Citizens had failed to meet its burden on administrative appeal. That is, Citizens had failed to show Ecology had "committed clear error" in refusing to consider recycling as a best available control technology. *Id.* at 21. The Administrator also dismissed as moot Citizens' argument concerning deNOx control technologies because Spokane agreed to install the requisite technology. *Id.* at 23. The Administrator thus remanded the permit to Ecology to set new pollutant levels recalculated for deNOx technologies. *Id.* The Administrator "strictly limited" the scope of any future appeal to those revised pollutant levels. *Id.* at 24.

## 2. Recycling as a New Source Performance Standard

A month prior to Spokane's 1987 permit application, EPA published notice of proposed new rules for New Source Performance Standards for municipal waste combustors ("MWCs") such as Spokane's. 52 Fed. Reg. 25,399 (1987). The notice mentioned recycling as a proposed New Source Performance Standard. *Id.* On December 20, 1989, six months after the Administrator's order denying Citizens' appeal of the Spokane incinerator permit and while that permit was on remand to Ecology, EPA published the proposed New Source Performance Standards. 54 Fed. Reg. 52,251 (1989). In its proposed rule, EPA observed that as a matter of common sense recycling is an appropriate technology for reduction of air pollution from incinerators. *Id.* at 52,281. EPA also noted that it was "unable to reliably quantify the emission reductions attributable to materials separation when an MWC is equipped with highly efficient at-the-stack air pollution control devices." *Id.* The Administrator approved the draft New Source Performance Standards, and opened them for public comment. When Citizens petitioned for review in this court, final approval of recycling as a New Source Performance Standard was still pending.[See footnote 4]

## 3. Spokane II: The Second Appeal

In September 1989, after an additional public comments period, Ecology issued revised final approval of Spokane's incinerator permit. Citizens petitioned the Administrator for review of the revised permit. In its petition, Citizens argued that the revised NO<sub>x</sub> emissions limit was still

---

Footnote 4. Since submission of the case to this court, EPA has rejected recycling as a New Source Performance Standard. See 56 Fed. Reg. 5,488, 5,496-98 (1991). Referring to the instant case, however, EPA noted that "whether an emission reduction requirement based on source separation [recycling] is for a specific incinerator project may continue to be raised on a case-by-case basis in individual BACT [best available control technologies] determinations." *Id.* at 5,496 n.4.

too high because it did not account for reductions that would result from "a more vigorous waste reduction and recycling program. In support of its petition, Citizens cited the draft New Source Performance Standard for recycling for municipal incinerators recently approved by the Administrator. The petition also included a study of Seattle's successful recycling program.

On January 2, 1990, the Administrator denied Citizens' petition. In re Spokane Regional Waste-to-Energy Project, PSD Appeal No.89-4 (EPA Jan. 2, 1990) ("Spokane II"). The Administrator again ruled that Citizens had failed to meet its burden on administrative appeal. *Id.* at 2-3. The Administrator further held that Citizens had improperly tried to raise the same recycling issue the Administrator had foreclosed in the prior denial. *Id.* at 4. On March 8, 1990, Citizens petitioned this court for review of the Administrator's Spokane I and Spokane II orders.

#### STANDARD OF REVIEW

The Administrative Procedure Act governs judicial review of EPA decisions. Accordingly, we may set aside the decision permitting the Spokane incinerator only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. Section 706(2)(A); accord *Citizens Against the Refinery's Effects, Inc. v. United States EPA*, 643 F.2d 178, 181 (4th Cir. 1981); see also *Northern Plains Resource Council v. United States EPA*, 645 F.2d 1349, 1358 (9th Cir. 1981) ("EPA is obligated to articulate a rational connection between the facts found and the choice made") (quotation omitted). In reviewing the Administrator's interpretation of the Clean Air Act, we "must reject administrative constructions which are contrary to clear congressional intent." *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 843 n.9 (1984). If, however, we determine that the Clean Air Act is "silent or ambiguous with respect to the specific issue," we determine only whether the Administrator's "answer is based

on a permissible construction of the statute." Id. at 843; see also *Utility Reform Project v. Bonneville Power Admin.*, 869 F.2d 437, 442 (9th Cir. 1989). Deference also guides our review of the Administrator's interpretation of EPA regulations if the interpretation is not unreasonable. See *Lambert v. FDIC*, 847 F.2d 604, 606 (9th Cir. 1988).

## DISCUSSION

### A. The Spokane I Order

[1] Citizens contends that the Administrator erred by holding Citizens had failed to meet an "especially heavy" burden of providing "hard data" in support of recycling as a best available control technology for the Spokane incinerator. Spokane I at 13-14. Citizens argues that, by improperly imposing this burden, the Administrator changed the rules of administrative review without notice, prevented Citizens from complying with the new rules, and shifted the burden of advancing new air pollution control technologies from PSD applicants to public intervenors.

The PSD permit procedure imposes different burdens on different parties at various stages of the process. Initially, the burden rests with the PSD applicant to identify the best available control technology. Relying on EPA "guidance" memoranda, the Administrator concluded that "the statutory definition of BACT [best available control technology] imposes a responsibility on the permit applicant to identify the particular 'available' technology that will produce the maximum degree of reduction of each regulated pollutant to be emitted from the proposed facility." Spokane I at 8 (emphasis omitted); see also 42 U.S.C. Section 7475(a)(3) (placing responsibility on the applicant to demonstrate that emissions from the proposed new source will not cause excessive air pollution). Specifically, the applicant is expected to employ a "top-down" methodology to identify the best available control technology. Spokane I at 9.

Under the top-down methodology, applicants must apply the best available control technology unless they can demonstrate that the technology is technically or economically infeasible. *Id.* The top-down approach places the burden of proof on "the applicant to justify why the proposed source is unable to apply the best technology available." *Id.* (quoting EPA "guidance" memorandum) (emphasis added). The burden of identifying and applying the best available control technology thus lay with Spokane during the proceedings before Ecology.

[2] Once the permitting process reaches the public comments stage, "[a]ll persons, including [permit] applicants, who believe...the...tentative decision to...prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position." 40 C.F.R. Section 124.13. The permitting authority is then obligated to respond to "all significant comments." *Id.* Section 124.17(a)(2). As the Administrator recognized in this case, Spokane I at 12-13, "comments must be significant enough to step over a threshold requirement of materiality before any lack of agency response or consideration becomes of concern. The comment cannot merely state that a particular mistake was made...; it must show why the mistake was of possible significance in the results." *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553 (1978) (quoting *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 394 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974)) (emphasis added).

[3] Upon initial approval of a permit, any person who filed comments may petition the Administrator for review of the permit decision on any ground, so long as it was raised to the extent required during the public comment period. 40 C.F.R. Section 124.19(a). In petitioning the Administrator for review of a PSD permit, the burden shifts from applicants to petitioners such as Citizens. Under EPA regulations, in order to obtain

administrative review petitioners must show that approval of the permit was based on:

(1) A finding of fact or conclusion of law which is clearly erroneous, or

(2) An exercise of discretion or an important policy consideration which the Administrator should, in his or her discretion, review.

Id. Petition for administrative review of a permit decision, then, is not a matter of right. Indeed, as the Administrator emphasized, EPA has determined that the "power of review should be only sparingly exercised,' and 'most permit conditions should be finally determined at the Regional [State] level.'" *Spokane I* at 3 (quoting preamble to review regulation, 45 Fed. Reg. 33,412 (1980)).

[4] Once the case reaches this court, we apply the arbitrary or capricious standard set forth above to the agency action approving the PSD permit. Contrary to EPA's argument, we do not simply review whether it was arbitrary or capricious for the Administrator to reject Citizens' claims that Ecology clearly erred. Rather, we conduct a deferential review of the entire agency action, including the adequacy of Ecology's response to Citizens' comments. See 5 U.S.C. Section 704 ("A preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action."); see also *id.* Sections 706 (providing for judicial review of "agency action"), 551(13) (defining "agency action" as including "the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act"), 701 (b)(2) (incorporating section 551 definition of "agency action" into APA judicial review provisions).

With these varying standards and levels of review in mind, the issue ultimately presented to this court is whether EPA's

response to Citizens' comments concerning recycling was arbitrary or capricious. We think this issue turns on whether the agency properly relied on the "significant comment" threshold test set forth at 40 C.F.R. Section 124.17(a)(2) in refusing to consider recycling as a possible best available control technology.

[5] In taking this approach, we reject Citizens' argument that, instead of relying on the Section 124.17 threshold test, EPA imposed a new "heavy burden" requiring Citizens to produce "hard data" concerning recycling before EPA could be required to consider recycling as a possible best available control technology. Citizens bases its argument here on the fact that Ecology responded to Citizens' comments, and that Section 124.17 only requires a response when comments are "significant." Citizens therefore concludes that its comments must be significant, such that EPA must have employed a different, new test in order to avoid further consideration of recycling.

[6] We disagree. Citizens' argument fails to take into account that the burden of proof at the permitting stage rested upon the permit applicant, not EPA. So long as EPA declines to require a response from the applicant, and otherwise does not substantively respond to a comment, we surmise that EPA has not considered the comment to be significant. It is this determination that we must review.[See footnote 5]

---

Footnote 5. "While we may not supply a reasoned basis for the agency's action that the agency itself has not given, we will uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned." Northern Plains Resource Council, 645 F.2d at 1358 (citations and quotation omitted); accord *California Energy Common v. Bonneville Power Admin.*, 909 F.2d 1298, 1314 (9th Cir. 1990), cert. denied, 111 S. Ct. 1682 (1991). As will appear, we think the path we find the agency to have taken is reasonably discernible, and so we proceed to review whether, in taking this path, the agency has gone out of bounds.

## 1. Sufficiency of Citizens' Comments

[7] Anticipating our approach, Citizens contends that the Administrator erred in holding that Citizens' comments on Spokane's PSD application were not sufficiently significant to require Ecology either to request a response from the permit applicant or otherwise to consider recycling as a possible best available control technology. It is "incumbent upon intervenors who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the intervenors' position and contentions." *Vermont Yankee*, 435 U.S. at 553. Citizens contends that their comments to Ecology about recycling met this standard.

[8] In considering Citizens' administrative petitions, the Administrator noted that, because the permit applicant bears the burden of identifying the best available control technology, the slightest suggestion by an intervenor in the comments might compel applicants to undertake time-consuming, costly studies. *Spokane I* at 12. Deploring this scenario, the Administrator emphasized that applicants and agencies need respond in detail only to "significant comments." *Id.* (emphasis added by Administrator) (quoting 40 C.F.R. Section 124.17(a)(2)). Citing the *Vermont Yankee* Court, the Administrator noted that "petitioners' responsibility to present its position and contentions effectively was especially heavy" when asking an applicant or agency to "embark upon an exploration of uncharted territory." *Id.* at 13-14 (quoting *Vermont Yankee*, 435 U.S. at 553). Finding that recycling as an air pollution control was such "uncharted territory," the Administrator held that Citizens failed to meet its burden to show Ecology clearly erred in failing to evaluate recycling in detail despite Citizens' comments. We agree with the Administrator's reading of the *Vermont Yankee* decision.

[9] In light of Citizens' comments and *Vermont Yankee*, EPA's decision not to consider recycling as a possible best available control technology was not arbitrary or capricious.

Citizens does not assert that at the time it originally filed its comments with Ecology, hard data existed concerning the effects of fuel cleaning and separation used in combination with state-of-the-art cleaning devices. Rather, it is undisputed that no such hard data existed. In considering Citizens' comments, Ecology stated that the technology needed further study in order to quantify its benefits, and even after the Spokane PSD permit had been issued, a 1989 EPA Municipal Waste Task Force Report concluded that "data are currently inadequate to determine precisely the effect on air emissions and ash of eliminating specific materials from the waste stream prior to combustion." Citizens does not contest these statements.

[10] Although Citizens has structured its comments so as to be more specific than were those in Vermont Yankee, Citizens offers no hard evidence of the effectiveness of fuel cleaning and separation in combination with scrubbers and baghouses. Nor does Citizens refer to analogous technology that would quantifiably validate the effectiveness, or even the use, of fuel cleaning and separation in combination with state-of-the-art technologies. Instead, Citizens contends its comments are sufficient to provoke consideration of recycling as a possible best available control technology on the common sense argument of "burn less, pollute less."

[11] Taken by itself, "burn less, pollute less" is of course a common sense approach. However, once the addition of state-of-the-art control technologies are introduced into the equation, this common sense statement can no longer stand on its own two feet. As the Administrator indicated, because Spokane's proposed incinerator will incorporate state-of-the-art pollution control technologies, recycling may not result in a "demonstrable reduction in emissions of regulated pollutants." Spokane I at 22. Thus, Citizens was required to introduce something more specific. In particular, it appears EPA considered necessary some indication of what materials recycling would remove from the waste stream, and what regulated air pollutants

would thereby be further diminished after existing control technologies have been taken into account. Here, Citizens did not set forth with specificity, if at all, either issues or evidence in support of its common sense argument.

[12] As the Administrator concluded, the three studies submitted by Citizens are not relevant to the question whether fuel cleaning and separation in combination with conventional, state-of-the-art pollution control equipment is best available control technology for the Spokane incinerator.[See footnote 6] Spokane I at 15-17. One of the studies compared emissions from incinerators lacking air pollution controls to those from the same uncontrolled incinerators with the addition of recycling. *Id.* at 15. The Administrator reasoned that "it is impossible to conclude" from this study whether recycling would have decreased emissions further had the test incinerators also employed the state-of-the-art technologies proposed for the Spokane incinerator. *Id.* at 15-16. Another study determined that recycling was not the best available control technology for the facility in San Marcos, California. *Id.* at 16-17. Thus, none of the studies supported the proposition that a recycling requirement for Spokane's incinerator would reduce emissions of regulated pollutants over and above the reductions Spokane will achieve by installing the other technologies already required by the PSD permit. *Id.* at 17. We find nothing arbitrary or capricious in the Administrator's analysis of these studies.

---

Footnote 6. The three studies are "A Non-Incineration Alternative Approach to Solid Waste Management Using Recycling Based Strategies for the Town of Oyster Bay, New York," June 1988 ("Oyster Bay" study); Letter dated May 25, 1988, from David P. Howekamp, Director, Air Management Division, EPA Region IX, to Larry Richardson, North County Resource Recovery Associates, with attachments ("San Marcos" study); National Recovery Technologies, Inc., "Effects of MSW Preprocessing on Thermal Conversion of MSW in Mass Burn Incineration," May 31, 1995 ("NRT" study).

In light of the Statutory requisite that the proposed technology be the best available control technology, and in the absence of anything specific or quantifiable in support of a position that common sense alone cannot sustain, we conclude that EPA's decision not to consider recycling in permitting the Spokane incinerator was not arbitrary or capricious.

## 2. Construction of the Statutory Term "Best Available Control Technology"

[13] Citizens also contends that, in requiring it to demonstrate quantitatively the effects of recycling in combination with pollution control technology, the Administrator erred in construing the term "available," as used in the statutory "best available phrase control technology," to mean quantifiably effective." Citizens points out that the Clean Water Act requires new sources of pollution to employ the "best available demonstrated control technology." 33 U.S.C. Section 1316(a)(1) (emphasis added). Congress did not require "demonstrated" effectiveness under the Clean Air Act, however. Instead, Citizens argues, a technology is "available" under the Clean Air Act so long as it is not "purely theoretical or experimental." See *Portland Cement Ass'n*, 486 F.2d at 391 (quotation omitted). The Administrator erred, Citizens concludes, in denying Citizens' petition for lack of data quantifying recycling as a best available control technology for Spokane's incinerator. Obviously, Citizens argues, recycling is neither purely theoretical nor experimental.

[14] Even if we were to agree that the Administrator erred in construing the statutory term "available" to mean quantifiably effective," the error did not prejudice Citizens. As Citizens concedes, a technology's effectiveness must be considered at some point to determine whether it is the "best" technology. The Administrator's rationale applies with equal force to a "best" as well as to an "available" determination. As the Administrator observed, "without the requisite knowledge about the technology's effects on emissions, the technology also cannot

be regarded as the 'best' technology." Spokane I at 18. Indeed, and as the Administrator further noted, the top-down ranking methodology for best available control technologies requires some kind of quantification of effectiveness in order to rank technologies. Spokane I at 9-10. Accordingly, we find no error in the Administrator's application of the term "best"; we have no occasion to rule on EPA's construction of the term "available."

### 3. The New Source Performance Standard for Recycling

[15] Citizens argues finally that EPA itself supplied whatever substantiation Citizens' comments may have lacked when the Administrator approved the draft New Source Performance Standard requiring recycling for municipal incinerators such as Spokane's. In approving the new recycling standard, Citizens points out, the Administrator relied on both the "NRT" study[See footnote 7] and the same common sense inferences rejected by the Administrator in denying Citizens' first petition. If the NRT study and common sense suffice for the proposal of nationwide, mandatory standards, Citizens argues, they ought to suffice to require Ecology and EPA to consider recycling as a possible best available control technology.

In the order denying Citizens' second petition, the Administrator explained three reasons for refusing to consider the proposed new recycling standard in support of Citizens' petition. Spokane II at 5 n.3. First, the new standard was still in draft form, susceptible to public comment and change. *Id.* Second, if finally adopted, the standard would apply to Spokane's incinerator in all events. *Id.*[See footnote 8] Third, the evidence supporting the new standard did not appear in the record for Spokane's PSD permit either before Ecology or before the Administrator in the first petition. *Id.* In the "interest of repose," therefore, the Administrator declined to review the evidence at that stage. *Id.*

---

Footnote 7. See *supra* note 6.

Footnote 8. After this case was submitted to this court, EPA in fact rejected the recycling New Source Performance Standard. See *supra* note 4.

Citizens deftly attempts to undermine the Administrator's rationale. If the issue is persuasiveness of the evidence to EPA itself, Citizens argues, lack of final approval does not weaken the Administrator's imprimatur on the evidence shown by his initial approval of the draft recycling standard. Citizens adduced the exact same evidence in its comments as EPA considered in proposing the new recycling standard; i.e., the NRT study and "common sense." The NRT study and common sense arguments were on the record both before Ecology during the permit process and before the Administrator in Citizens' first petition. Thus, Citizens concludes, the Administrator acted arbitrarily and capriciously by rejecting, on the one hand, Citizens' recycling evidence in support of its petition and, on the other hand, adopting the exact same evidence in support of the draft recycling standard for all new municipal incinerators.

[16] Data supporting a New Source Performance Standard, however, must necessarily be more generated than data supporting a best available control technology determination for a particular incinerator in a particular place. Indeed, we have previously distinguished New Source Performance Standard or "NSPS" determinations from those made under the PSD program. In Northern Plains Resource Council, we explained:

While the NSPS program and the PSD are both interrelated parts of a comprehensive federal legislative effort to protect and enhance this nation's air quality, the two programs play different roles in achieving that broad general goal....

The focus of the NSPS program...is upon the "affected facility" component in a stationary source, i.e. the particular apparatus to which a standard is applied. The NSPS program is therefore equipment oriented. On the other hand, the PSD program covers the whole stationary source, and focuses on where the plant will be located and its potential effect on its environs. The PSD program is therefore site oriented.

645 F.2d at 1355-56 (emphasis in original) (citation omitted). We therefore concluded that definitions of statutory terms are not necessarily transferable between the PSD and NSPS programs. *Id.* at 1356. Likewise, the data required for adoption of an "equipment oriented" New Source Performance Standard may fall far short of the data required for the "site oriented" best available control technology determination under the PSD program. Given the distinction between the two programs, the Administrator did not act arbitrarily and capriciously in rejecting Citizens' petition under the PSD program based on data valid for the NSPS program.

#### B. The Spokane II Order

Citizens also argues that the Administrator erred in refusing to consider Citizens' second petition arguing for recycling as a best available control technology in conjunction with deNOx technology. Citizens points out again that the Administrator's approval of recycling as a draft New Source Performance Standard bolstered their second petition. Moreover, Citizens argues, the Administrator erred in refusing to reconsider recycling in the second petition "in the interest of repose." Congress intended applicants to complete the entire PSD permit process, subject to revision at any time, before commencing construction, Citizens argues. The Administrator's concern for "repose," Citizens argues, thus thwarts congressional intent that new sources of air pollution incorporate up-to- the-last-minute technologies for emission reduction.

[17] Citizens correctly describes congressional intent; the Administrator should not have cited "repose" as a rationale for denying Citizens' second petition. See 42 U.S.C. Section 7475(a)(1); 40 C.F.R. Section 124.19(f).[See footnote 9] However, because we reject

Citizens' arguments concerning its first petition, we reject Citizens' objections to the Administrator's Spokane 11 order as well. Citizens offered nothing more specific on remand than it did during the initial comment period. Certainly the proposed recycling standard offers no additional information supporting Citizens' position. As EPA noted in proposing the standard, the agency was "unable to reliably quantify the emission reductions attributable to materials separation." 54 Fed. Reg. 52,251 (1989). The Administrator therefore did not act arbitrarily and capriciously in declining to reconsider recycling as a best available control technology upon Citizens' second petition.

#### C. Attorney Fees

Citizens requests an award of attorney fees under the Equal Access to Justice Act, 28 U.S.C. Section 2412(d). We deny the request because we conclude that Citizens does not prevail on this petition for review.

#### CONCLUSION

From a broad policy perspective, Citizens makes a good case for consideration of recycling as a best available control technology in PSD permit decisions. Our opinion today by no means weakens that case. Indeed, in denying Citizens' petition, the Administrator affirmed the policy of recycling. "I consider recycling," the Administrator declared, "an essential part of intelligent planning for the solid waste disposal predicament that more and

---

Footnote 9. Section 7475(a) prohibits construction of any facility, including Spokane's incinerator, until a permit has issued which has been subject to public comment on alternatives and to agency review. Regulation 124.19(f) defines final agency action as exhaustion of all administrative remedies, including a petition for EPA administrative review. Citizens is therefore correct that an interest in repose would not alone justify the Administrator's refusal to grant a petition for review when, on remand, additional public comments were properly solicited and made.

3004 CITIZENS FOR CLEAN AIR v. EPA

---

more of our Nation's cities are facing." Spokane I at 4. Citizens' petition for review, however, relies on unpersuasive criticisms of the Administrator's detailed orders denying Citizens' administrative petitions. The petition for judicial review is therefore

DENIED.

PRINTED FOR  
ADMINISTRATIVE OFFICE-U.S. COURTS  
BY BARCLAYS / ELECTROGRAPHIC-SAN FRANCISCO-(415) 588-1155

---

The summary, which does not constitute a part of the opinion of the court,  
is copyrighted 1992 by Barclays Law Publishers.

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

---

In the Matter of:

Brooklyn, Navy Yard Resource  
Recovery Facility

PSD Appeal No. 88-10  
(consolidating Appeal Nos.  
88-10, 90-10, 90-11, 90-12)

Applicant

---

REMAND ORDER

On September 7, 1990, EPA Region II issued to SES Brooklyn. Company (SES) a final prevention of significant deterioration (PSD) permit for the construction and operation of a new 3000-tons-per-day municipal waste incinerator. The project will be located at the Brooklyn Navy Yard in Brooklyn, New York. Seven petitions for review have been filed challenging the permit. The permit has been amended three times, and some petitions challenge earlier versions of the permit, while others challenge the latest version. For the reasons stated below, review of all but one of these petitions is denied. The remaining petition has merit, however.

Accordingly the permit is remanded to Region II for the very limited purpose of considering the viability of a reasonable materials separation program for nitrogen-containing materials.

## I. BACKGROUND

The final permit was first issued on August 26, 1988. Dr. Bernard Fryshman, Ph.D. and the Environmental Defense Fund (EDF) both petitioned for review of the Region's decision. On September 28, 1988, the Region formally amended the best available control technology (BACT) determinations in the permit for sulfuric acid mist, sulfur dioxide and hydrogen fluorides. The administrative appeal period, which had begun on August 27, 1988 for appeals relating to the original version of the final permit, was extended another 30 days for appeals relating to the amendments. Dr. Fryshman filed a second petition in response to these permit amendments. Later, on October 11, 1989, the Region issued a revised draft permit with amendments to the NO<sub>x</sub> and PM-10 limitations. The Region received public comment on these amendments between October 23, 1989 and February 22, 1990 and held a public hearing on them on February 15, 1990. In its public notice announcing the comment period and the public hearing, the Region made it clear that the comment period and public hearing were limited to comments on the new limitations for NO<sub>x</sub> and PM-10. After the public comment period, the Region changed the control technology for No<sub>x</sub> and the limitations for NO<sub>x</sub>, ammonia slip, and sulfur dioxide, without subjecting these changes to public comment, and on September 7, 1990, the Region issued a modified final permit incorporating these latest changes. Dr. Fryshman, the New York Public Interest Research Group (NYPIRG), and Samuel Bishop all filed petitions for review challenging the September 7th issuance of the final permit.

## II. DISCUSSION

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 Regional level \* \* \*." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioner.

### A. Environmental Defense Fund's Petition

Region II issued a final permit to SES on August 26, 1988. Section 124.19 of the Consolidated Rules provides that a petition for review must be filed within 30 days after a PSD final permit decision. 40 CFR Section 124.19 (1990). Section 124.20, governing computation of time, provides that "[a]ny time period scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event." 40 CFR Section 124.20 (1990). Section 124.20 also provides that "[w]henever a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper upon him or her by mail, 3 days shall be added to the prescribed time." *Id.* Thus, the period for filing a petition challenging the permit began on August 27, 1988, and ended on September 28, 1988 (33 days). The Environmental

Defense Fund (EDF) filed its Petition for Review on September 30, 1988, two days late.

Accordingly, the petition is untimely, and review is denied.

#### B. Dr. Bernard Fryshman's Petitions

I have carefully reviewed Dr. Fryshman's three petitions and the Region's responses to them.[See footnote 1/] I am satisfied that the Region has given the petitions due consideration. There is nothing in those petitions that leads me to believe that the Region has committed clear error in its Brooklyn Navy Yard permit determination. Nor is there anything to suggest that the

---

Footnote 1/. Dr. Fryshman sent a letter to this office dated February 6, 1991, complaining that EPA Region II had not provided a meaningful opportunity for public input during the permitting process for the proposed Brooklyn Navy Yard facility. In his February 6th letter, Dr. Fryshman presents his complaint about restrictions on public input as an another petition for review. He states:

In addition to the factual items placed before you in my earlier briefs \* \* \*, there is now an important POLICY CONSIDERATION which must be brought before the Administrator for review: MAY REGION II SO RESTRICT PUBLIC INPUT AS TO DENY CONGRESSIONAL INTENT REGARDING FULL PARTICIPATION BY CITIZENS?.

The deadline for filing petitions for review (September 28, 1988) passed well before Dr. Fryshman filed this latest petition. Accordingly, the petition is untimely, and review is denied. Even if the petition had been filed in a timely fashion, however, I would have denied review. By all accounts, Region II provided Dr. Fryshman with every opportunity to participate that he was entitled to under the rules. Dr. Fryshman's real quarrel is with the rules governing public participation, not with the way Region II applied those rules. Section 124.19, which governs this appeal, authorizes me to review contested permit conditions, and is not intended to provide a forum for entertaining challenges to the validity of the procedural rules governing the permitting process.

Region's decision involves an exercise of discretion or a public policy issue that should be reviewed as a discretionary matter. Review of the issues raised in Dr. Fryshman's petitions is therefore denied.

### C. Samuel Bishop's Petition

As discussed above, the most recent public comment period in the Brooklyn Navy Yard permitting process was limited in scope to changes in the permit limitations for PM-10 and NO<sub>x</sub>. After that comment period, the Region made several new changes in the permit relating to the NO<sub>x</sub> control technology and to the permit limitations for No<sub>x</sub>, ammonia slip, and sulfur dioxide.

Accordingly, with respect to the petitions for review filed after September 7, 1990, this office will review only those issues relating to the changes that prompted the opening of the public comment period (i.e., changes in the NO<sub>x</sub> and PM-10 limitations) or the changes that were

made after the public comment period ended (i.e., changes in the control technology for NO<sub>x</sub> and the new limitations for NO<sub>x</sub>, ammonia slip, and sulfur dioxide). The issues in Mr. Bishop's petition relate to the air quality model used to determine how emissions from the proposed facility will affect air quality in the surrounding area. These air quality modeling issues are distinct from the control technology issues that are subject to review in this phase of the permitting process. See *World Color Press, Inc.*, PSD Appeal No. 88-4, at 4 (Dec. 13, 1990) ("[A] PSD permit applicant must demonstrate that emissions from the operation of the facility will not cause or contribute to air pollution in excess of the national ambient air quality standards ("NAAQS"). 42 U.S.C. Section 7475(a)(3). This air quality requirement is independent from the technology (i.e., BACT) requirement.") (footnote omitted). Mr. Bishop's petition says absolutely nothing about the best available technology for controlling emissions of NO<sub>x</sub> and PM-10. The air quality modeling issues raised by Mr. Bishop were reasonably ascertainable in 1988 when the final permit for Brooklyn Navy Yard was first issued and should have been raised then. Mr. Bishop is precluded from raising them now.

Even if Mr. Bishop could raise these modeling issues now, they would not warrant review. After careful and thorough consideration of Mr. Bishop's arguments, I am not convinced that the Region's modeling determinations are clearly erroneous. Nothing in Mr. Bishop's two briefs persuades me that the modeling used in this case will significantly underpredict the impact that emissions from the proposed facility will have on the affected area.

#### D. NYPIRG's Petition

NYPIRG believes that the best available control technology (BACT) for nitrogen oxide emissions is a combination of the combustion and add-on control technologies prescribed in the final permit plus materials separation (i.e., removal of nitrogen-containing materials from the waste stream), which was not prescribed in the permit. NYPIRG contends that SES's BACT analysis was defective because it did not include consideration of materials separation. For the reasons set out below, I agree. The viability of a materials separation program targeted at nitrogen containing wastes should be considered by the permitting authority in the BACT analysis for the Brooklyn Navy Yard facility.

##### 1. Background

"Best available control technology" or BACT is defined in the regulations as an "emissions limitation" which reflects the "maximum degree of reduction" of "each pollutant subject to regulation under [the] Act," which the Administrator determines is "achievable" after "taking into account energy, environmental, and economic impacts and other costs." Clean Air Act section 169(3), 42 U.S.C. Section 7479(3); 40 CFR Section 52.21(b)(12) (1990).[See footnote 2/]

---

Footnote 2/. The full regulatory definition of "best available control technology" is as follows:

Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under (the) Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement

(continued...)

Achievement of an emission limitation may be secured "through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant." Id. The term "emissions limitation" is defined in the Clean Air Act as:

a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis" including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction.

CAA Section 302, 42 U.S.C. Section 7602. The regulatory BACT definition provides that

[i]f the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of the best available control technology.

40 CFR Section 52.21(b)(12) (1990).

---

Footnote 2/ (...continued)

methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such technology shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

40 CFR Section 52.21(b)(12) (1990).

In this case, NYPIRG contends that SES's BACT analysis should have included consideration of a requirement to remove nitrogen-containing waste from the waste stream combined with the combustion and add-on controls prescribed in the permit. NYPIRG argues that this combination is the most stringent available technology. Even if it is not the most stringent technology, NYPIRG believes it is nevertheless the "best" technology because of the environmental, energy, and economic benefits it would produce.

The issue of whether materials separation should be considered in a BACT analysis was first addressed in Spokane Regional Waste-to-Energy Project, PSD Appeal No. 88-2 (June 9, 1989). In Spokane, the petitioners requested review of a PSD permit for construction of an 800-ton-per-day municipal waste incinerator at an existing landfill west of the City of Spokane. The permit determination was made by the Washington State Department of Ecology ("Ecology"). Petitioners contended that Ecology had erred in its BACT determination for control of heavy metal and toxic pollutant emissions by not giving in-depth consideration to "fuel cleaning and separation" in combination with the conventional, state-of-the-art pollution control equipment already required by the Spokane permit. I rejected this contention, pointing out that petitioners were unable to provide evidence that the addition of fuel cleaning and separation had resulted in better emissions reductions than those achieved by the highly effective conventional

equipment and operating practices already required by the Spokane permit. *Id.* at 14-15. I stated that, while much was known about how and what to recycle to achieve waste reduction, no hard data were available to judge whether supplementing conventional, state-of-the-art pollution control equipment such as baghouses and scrubbers with fuel cleaning and separation would cause reductions or increases of regulated pollutant emissions. *Id.* at 14. I observed that a technology is obviously not available in any meaningful sense of knowledge about its effect on emissions, in the particular configuration in which it would be employed, is so incomplete as to be unusable. *Id.* at 17. I held, therefore, that petitioners had not shown that fuel cleaning and separation, in combination with conventional, state-of-the-art pollution control equipment, constitute available technologies for purposes of the BACT determination. In conclusion, I suggested that, as more communities adopt recycling in conjunction with incineration, more information about this combination of technologies will become available, and that at some point, future permit applicants may be required to include consideration of recycling in their BACT determinations. *Id.* at 22. That point has now arrived, because available information indicates that reducing certain constituents of the waste stream can reduce pollutant emissions.

On December 20, 1989, after the Spokane decision, the Agency published a proposed rule setting new source performance standards for MWCs.[See footnote 3/] In the proposed rule,

the Agency proposed a materials separation requirement as a component of "best demonstrated technology" for MWCs. See 54 Fed. Reg. 52251 (Dec. 20, 1989). The proposed standards would have required all MWCs to reduce the amount of solid waste to be processed by at least 25% by removing from the waste stream the following types of waste: paper and paperboard; ferrous metals; nonferrous metals; glass; plastic; household batteries; and yard wastes. *Id.* at 52254. The proposed standards also would have prohibited MWCs from burning household batteries and lead-acid vehicle batteries weighing more than 11 pounds. *Id.* at 52254-55. These materials separation requirements were to be satisfied by on-site separation, off-site community source

---

Footnote 3/. New source performance standards are promulgated in accordance with Section 111 of the Act, which authorizes the Administrator to identify any category of sources that "causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." CAA Section 111(b)(1)(A), 42 U.S.C. Section 7411(b)(1)(A). Once this category has been identified, the Administrator must then set emissions standards for new facilities falling within the identified category. CAA Section 111(b)(1)(B), 42 U.S.C. Section 7411(b)(1)(B). The standards must reflect the "degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated (best demonstrated technology]." CAA Section 111(a)(1), 42 U.S.C. Section 7411(a)(1). The "best demonstrated technology" in a new source performance standard for a given pollutant is not necessarily BACT for that pollutant. But BACT must always be at least as effective as the technology required by the new source performance standard. See CAA Section 169(3), 42 U.S.C. Section 7479.

reduction or material separation (recycling), or a combination of the two. The Agency explained that:

materials separation, used in conjunction with good combustion practices, and add-on controls, will result in further reductions of emissions from MWC'S. It is simply common sense, and the Agency's expectation, that reductions in the amount of pollution generating materials combusted in an MWC will reduce the amount of pollutants in its air emissions.

Id. at 52281. The Agency noted, however, that while

[t]he proposed requirements for materials separation would reduce overall MWC emissions the amount of emissions reduction cannot be accurately predicted since there are little data relating materials separation to MWC emissions when materials separation occurs in conjunction with at-the-stack air pollution control.

Id. at 52257.

When EPA issued final source performance standards for MWC's, it declined at that time to require source separation on a national basis, and did not include the proposed materials separation requirements in the final rule. See 56 Fed. Reg. 5496 (February 11, 1991). The Agency had concluded that materials separation, in conjunction with conventional emissions control technologies, was not the best demonstrated technology for MWCs as a source category. In reaching this conclusion, EPA did not alter its findings in the proposed rule regarding the potential for reductions in MWC emissions through the use of source separation. Rather, the Agency relied primarily on uncertainty as to whether energy, economic, and nonair quality environmental impacts would result in a net benefit on a national basis. See

id. at 5496-97. Instead of adopting a uniform nationwide rule, EPA decided to address the source separation issue through the PSD process. Thus, EPA stated in the preamble to the final NSPS that "[t]he issue whether an emission reduction requirement based on a source separation is appropriate for a specific incinerator project may continue to be raised on a case-by- case basis in individual BACT determinations under CAA section 169(3)." Id. at 5496 n.4.

Consistent with previous determinations, the threshold question in this case is whether there is sufficient indication that a separation program would reduce emissions beyond the levels achieved by the conventional control technologies already included in the permit. See Spokane discussion, *supra*. Here, the record indicates that the types of materials separation programs being proposed by the petitioner might very well bring about some reduction in NO<sub>x</sub> emissions. First, despite its failure to consider source separation as a full-fledged component of the BACT determination for NO<sub>x</sub>, as part of its BACT determination Region II did include in the permit certain materials separation requirements that would apply if emission limits for NO<sub>x</sub>, lead, and other pollutants were exceeded. See 1990 Permit Modification, Attachment II, at 5. This determination shows that the permitting authority implicitly agrees that certain separation programs are likely to reduce NO<sub>x</sub> emissions. In addition, the Hahn study cited by the petitioner appears to confirm that there is a relationship between the amount of nitrogen-containing waste

going into an incinerator and the amount of nitrogen oxide emissions coming out of it. (NYPIRG Petition, Appendix 5).[See footnote 4/]

Based on the record of this case, I have concluded that Region II's failure to consider the viability of various measures presented by the petitioner as a means to reduce NOx emissions from the Brooklyn facility is inconsistent with the case-by-case approach to source separation adopted by the Agency in the final NSPS for incinerators. Therefore, the permit is remanded for such consideration. In deciding to remand this matter, however, I take great caution to note the limited nature of the remand and the fundamental difference which exists between the kind of materials separation program petitioner seeks in this case -- a program targeted at nitrogen-containing waste -- and the more general new source performance standards. Accordingly, on remand, the inquiry should be strictly limited to measures that might reduce the NOx emissions from this facility, and should not extend to a more general analysis of materials separation programs not presented by the petitioner.[See footnote 5/] This is not meant

---

Footnote 4/. It is also noteworthy, with respect to emissions of lead, that Region II did include in its BACT determination an emission control requirement that motor vehicle batteries be separated from the waste prior to incineration. See 1990 Permit Modification, Attachment II, at 4; see also 1988 Permit, Attachment IV at 22; NYPIRG Petition, Attachment 4, at 9.

Footnote 5/. Of course, consistent with my decision in North County Resource Recovery Associates, PSD Appeal No. 86-2 (Remand order June 3, 1986), consideration of source separation measures for the purpose of reducing NOx emissions should include the collateral impacts of such measures on emissions of other (continued...)

to suggest, however, that future permit applications need not consider potentially viable separation programs during the course of a BACT analysis just as any other available control method or practice should be considered in such an analysis.

Although Region II must consider source separation as part of its BACT determination for NO<sub>x</sub>, it does not follow that the Region must ultimately require source separation in this case. BACT requires the "maximum degree of reduction of each pollutant . . . through application of production processes and available methods, systems and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques." 42 U.S.C. Section 7479(3); see also 40 CFR Section 52.21(b)(12) (1990). In conducting the case-by-case BACT analysis required under the Act, the permitting authority shall take into account "energy, environmental and economic impacts and other costs" in determining the maximum reduction in emissions that is achievable for a particular facility. Thus, even if the methods proposed by petitioner can reduce No<sub>x</sub> emissions, it does not mean that these requirements must be imposed as BACT in this case. Rather, consideration of energy, environmental and economic

---

Footnote 5/ ( ... continued)

pollutants. Normally, such a North County inquiry would be limited to consideration of impacts on emissions of pollutants that are unregulated for purposes of the PSD program, because the BACT determination for each other regulated pollutant would directly consider the effects of the BACT determination for NO<sub>x</sub>. Due to the posture of this case, however, further plenary consideration of BACT for regulated pollutants other than NO<sub>x</sub> is foreclosed. Accordingly, in considering revisions to the BACT determination for NO<sub>x</sub>, Region II should evaluate the impacts of source separation measures directed to NO<sub>x</sub> on emissions of other regulated pollutants as well.

factors may dictate a different result. As noted in the final rule establishing NSPS limits for incinerators, the viability of a particular separation program is dependent on a number of critical factors. Also as noted in the final rule, the critical factors vary significantly from location to location. 516 Fed. Reg. at 5497.

As the petitioner points out, there are a wide variety of wastes that contain some nitrogen. Some of these are more susceptible than others to cost-effective separation from the wastestream prior to incineration. There need not be a consideration of every detail of every conceivable separation and collection program for every individual nitrogen-containing component of the waste stream for the BACT analysis requirements to be satisfied. Rather, on remand the inquiry should look at readily discernible components of the waste stream that contain nitrogen and that, if incinerated, may contribute to NOx emissions -- e.g. yard waste -- and examine realistic separation programs to determine their viability in this locale. It may well be that the practical difficulties and the costs associated with implementing a separation program for nitrogen-containing waste in the New York City area would lead the Region to conclude that these programs do not constitute BACT when the cost and other environmental impacts are considered.[See footnote 6/]

---

Footnote 6/. Some of the needed analysis may have already been undertaken by New York City when it developed its solid waste recycling (continued...)

SES argues that NYPIRG's proposal would require SES to redefine the purpose of its proposed facility:

[T]he Agency's own figures (54 Fed. Reg. 52,278) show that approximately 80 percent by weight of all MSW is made up of the paper and paperboard, yard wastes, food wastes, rubber, textiles and wood that NYPIRG proposes to have removed from the waste stream going to municipal waste combustors. Consequently, in the guise of a BACT review, NYPIRG would seek to compel the removal of more than three times as much material as the overall 25 percent reduction that [was proposed for] the NSPS rules. In essence, under NYPIRG's fuel cleaning proposal, the only things that could be burned at the BNYRRP would be cans, bottles and plastics and all three of those types of MSW will be subject to possible source separation under Local Law 19. The BNYRRP cannot be redefined into a composting heap the size of the Fresh Kills landfill in the guise of a BACT review.

(SES Memorandum in opposition to Petitions for Review, at 31.) NYPIRG contends that it is merely asking SES to engage in "fuel cleaning, " with municipal solid waste as the fuel and nitrogen-containing items as the pollution-causing impurity to be cleaned out of the fuel. "Fuel cleaning" is one of the control technologies specifically mentioned in the definition of BACT. CAA Section 169(3), 40 CFR Section 52.21(b)(12).

I do not construe NYPIRG's petition as seeking a 100 percent removal of nitrogen-containing wastes. See NYPIRG Supplemental Comments, Feb. 4, 1991, at 7. In any

---

Footnote 6/ (...continued)

program under Local Law 19. I encourage Region II to rely upon that program (and any related documents that may be available) as appropriate for the purposes of identifying available methods and levels of separation, and of identifying corresponding energy, environmental, an economic impacts. In addition, the Region may give appropriate weight to the experiences, findings and conclusions of the city in conducting the BACT analysis. Of course the Region may not simply assume that any prior analyses are adequate for BACT purposes, and must exercise independent judgment in making its own determinations.

event, NYPIRG now specifically concedes that it is appropriate for the permitting authority to determine an appropriate level of separation, if any, considering costs and other relevant factors. See NYPIRG Petition at 30. This is consistent with the normal conduct of a BACT analysis. Accordingly, I do not read NYPIRG's petition as seeking to redefine the source, nor will consideration of source separation render the facility nonviable. Consequently, I agree with NYPIRG that source separation would constitute fuel cleaning or treatment within the meaning of section 169(3) of the Act and the PSD regulations. On remand the potential separation program should be included as part of the BACT analysis. In this case, I consider the relevant cost criteria to include generally the factors considered by EPA in the development of the NSPS for municipal waste combustors. Among these are the cost of a separate collection program, the cost of trucks, worker wage rates, citizen participation rates, and other factors that affect the overall cost-effectiveness of separate collection. Such other costs would include materials processing costs, including materials recovery facilities or centralized composting programs and any administrative costs of such a program. On the other side of the ledger, the permitting authority should consider the avoided disposal Costs, and costs of avoided landfill disposal from any service area expansion. Also included would be the revenue from any projected sales of recovered materials, and the avoided cost of regular trash collection that may result from a separate collection program.

Other benefits could include any reduction in emissions from avoided landfill emissions for materials (from an expanded service area) that would otherwise have been landfilled. See generally Background Information Document, EPA 450/3-90-021, "Municipal Waste Combustion: Background Information For Materials Separation" (January 1991).

As noted above, the regulatory definition of BACT provides that work practice standards and the like may be employed to the extent that technological or economic limitations on the use of measurement methodologies would make an emissions standard infeasible. It is common for PSD permits to include a combination of emissions standards and work practice standards in the emission limitation for a given pollutant. This has been done by Region II in this permit, for example, by specifying an emission limit for lead to be met through the use of a baghouse, as well as a requirement for separation of motor vehicle batteries from the waste stream prior to combustion. See *supra* note 4. In the case of NO<sub>x</sub>, while it appears that a program of source separation may well result in some reduction in NO<sub>x</sub> emissions, it also appears from the record that the amount of such reductions cannot be accurately predicted. Consequently, if, on remand, Region II determines that some program of source separation should be included in the BACT determination for No<sub>x</sub>, it would be appropriate to include that requirement in a manner

consistent with other similar requirements.[See footnote 7/]

### III. CONCLUSION

I have considered the seven petitions for review that have been filed in this proceeding. EDF's petition and one of Dr. Fryshman's petition were not filed within the applicable appeal periods. Mr. Bishop's petition and Mr. Fryshman's other three petitions have failed to persuade me that the Regional Administrator was clearly erroneous in issuing the final permit or that his decision involves an exercise of discretion or an important policy issue that should be reviewed as a discretionary matter. Accordingly, review of these six petitions is hereby

---

Footnote 7/. As indicated above, my decision to remand this permit for consideration of source separation for NO<sub>x</sub> control is not intended to result in any reconfiguration of the Brooklyn facility or significant change in its planned usage. Controversies may remain in quantifying the efficacy of source separation as a means of reducing emissions of air pollutants from MWCs on a per-ton-burned basis. It should be noted, however, that consideration of source separation by those planning to construct MWCs in the future -- as part of a BACT analysis or otherwise -- may lead them to conclude that the best course would be to plan for construction of a smaller facility or to expand the MWC service area beyond what it might have been in the absence of source separation. To the extent that municipalities reduce the aggregate amount of waste incineration by a shift in solid waste strategies towards source separation and recycling, it is simply common sense that there will be a corresponding reduction in the aggregate amount of air pollution emitted by MWCs as a whole. See 54 Fed. Reg. 52281. These results would not be compelled by the BACT requirement. Should they occur, however, such results would certainly be consistent with the air quality planning and pollution prevention purposes of the PSD program: minimizing emissions from individual new sources so as to conserve clean air resources and maximize opportunities for future economic growth. See Clean Air Act section 160(1), (3) and (5), 42 U.S.C. 7470(1), (3) and (5).

denied. However, NYPIRG's petition does raise an issue worthy of consideration in the BACT analysis. Accordingly, I am remanding this permit to Region II for the very limited purpose of considering the viability of reasonably available material separation programs to reduce the NOx emissions from the Brooklyn facility.

So ordered.

---

WILLIAM K. REILLY

Dated: February 28, 1992

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Remand Order in the matter of Brooklyn Navy Yard Resource Recovery Facility, PSD Appeal Nos. 88- 10, 90-10, 90-11, 90-12, were sent to the following persons in the manner indicated.

First Class Mail,  
Postage Prepaid:

Roger Anderson  
Wheelabrator Technologies, Inc.  
Liberty Lane  
Hampton, New Hampshire 03842

Conrad Simon, Director  
Air and Waste Management Division  
EPA - Region II  
26 Federal Plaza  
New York, New York 10278

Bernard Fryshman, Ph.D.  
1016 East Second Street  
Brooklyn, New York 11230

Samuel A. Bishop  
Bishop & Schriffen, Consultants  
440 East 20th Street  
New York, New York 10009

Larry Shapiro  
New York Public Interest Research  
Group, Inc.  
9 Murray Street  
New York, New York 10007-2272

Alexandra Callam  
Assistant Regional Counsel  
Office of Regional Counsel  
EPA - Region II  
26 Federal Plaza  
New York, New York 10278

By Hand:

Bessie Hammel  
Headquarters Hearing Clerk  
Room 3708 (A-110)

---

Diane L. Weeks  
Branch Secretary  
Dated: March 5, 1992