

### EPA Issues PM<sub>2.5</sub> Implementation Proposal

On November 1, 2005, EPA issued a proposal to establish the requirements that States (and Tribes) must meet in their implementation plans for attainment of the PM<sub>2.5</sub> national ambient air quality standard (NAAQS). 70 Fed. Reg. 65,984. EPA made its PM<sub>2.5</sub> nonattainment designations effective April 2005, and thus, nonattainment SIPs will be due in April 2008. This article outlines key elements of the proposal.

#### **Implementation Exclusively Under Subpart 1 vs. Subpart 1/ Subpart 4 Combination**

A threshold issue for EPA in establishing the PM<sub>2.5</sub> implementation requirements is whether those requirements are to be established exclusively under subpart 1 of Part D of Title I, or under subpart 1 as supplemented by subpart 4. Subpart 1 provides the general requirements for provisions that must be included in nonattainment SIPs. Although titled "Additional Provisions for Particulate Matter Nonattainment Areas," subpart 4 only establishes requirements for PM<sub>10</sub> nonattainment SIPs. EPA proposes to establish PM<sub>2.5</sub> nonattainment requirements exclusively under subpart 1 and not attempt to incorporate modified elements of subpart 4 to make them fit for PM<sub>2.5</sub> standard nonattainment SIPs. A key issue in the litigation and subsequent ozone NAAQS implementation rulemakings has been the question of how to take into account the subpart 2 ozone nonattainment provisions in establishing requirements for ozone nonattainment SIPs for the 8-hour ozone standard. The Supreme Court rejected EPA's initial plan to have the 8-hour standard

implemented under subpart 1 once an area had attained the 1-hour standard.

#### **Classification of PM<sub>2.5</sub> Nonattainment Areas**

Under the proposed approach, the State will be required to submit an attainment demonstration for each nonattainment area proposing an attainment date that is as expeditious as practicable. In determining that attainment date, the State will need to demonstrate that it is achieving reasonable further progress (RFP) and adopt rules to implement the RACT and RACM requirements within the nonattainment area. Since PM<sub>2.5</sub> designations became effective in April 2005, the initial attainment date for PM<sub>2.5</sub> areas would be no later than April 2010. An area that is unable to attain by 2010 could receive an extension of from one to five additional years. Subpart 1 also provides for an area to obtain up to two 1-year attainment date extensions.

EPA indicates its preferred option is to not classify PM<sub>2.5</sub> nonattainment areas based upon the severity of pollution. The alternative option discussed in the proposal is to have areas designated as either "serious" or "moderate," which is the classification scheme under subpart 4. Serious areas would be those that could not attain by 2010 and would be required to adopt more stringent requirements than those areas that could achieve the standards by 2010. The deadline for serious areas would be no later than 2015.

#### **Reasonable Further Progress Provisions**

In brief, EPA proposes to handle the RFP requirements as follows. If an area submits an attainment demonstration showing that it will attain the standards by April 2010, five years from the date of the nonattainment designation, EPA proposes to find that the area's RFP requirement would be considered to be met by making this demonstration. If an area cannot demonstrate attainment of the PM<sub>2.5</sub> standard by 2010, the area would be required to submit an RFP plan when it submits its initial nonattainment SIP revision by April 2008. EPA proposes to allow states to have a degree of flexibility in its RFP plan by addressing different pollutants according to different schedules. EPA seeks comment on whether it should establish fixed emissions reduction requirements for areas projecting attainment after 2010 and on whether to establish a timetable with 3-year increments, such as is included in subpart 4.

### **Reasonably Available Control Measures (RACM)/Reasonably Available Control Technology (RACT)**

EPA proposes three basic alternatives for implementing the statutory RACT requirement. Under EPA's preferred alternative, RACT would only be required for sources whose potential to emit (PTE) is greater than 100 tons-per-year (tpy). For areas that are projected to attain by 2010, RACT would only be required to the extent necessary to attain by that date. In areas not projected to attain by 2010, RACT would be required on all sources whose PTE exceeds 100 tpy. Under one of the two other proposed alternatives, RACT would be required on all stationary sources in a nonattainment area, subject to the size threshold, regardless of when the area is projected to attain the standard. Under the other proposed RACT alternative, EPA would require RACT on all sources subject to the size threshold, but allow states to decline to adopt technically and economically feasible measures if adoption of those measures would not advance the attainment date by at least one year for the nonattainment area. EPA seeks comments on these options.

In determining RACT, EPA proposes that the condensible portion of emissions streams be

included, as well as the filterable portion. EPA indicates that it is developing a new test method that will quantify and characterize constituents of PM<sub>2.5</sub> emissions, including both the filterable and condensible portions of the emissions stream.

EPA proposes that, where RACT has previously been established, states would be allowed to accept the initial RACT analysis, if the state submits a certification with supporting information indicating that the previous determination currently represents an appropriate RACT level. EPA also proposes that states would be required to make a new RACT determination for any source for which "no additional controls" was the previous RACT determination. EPA requests comments on whether new RACT determinations should be required for all existing determinations that are older than a specified period of time, such as ten years, and on what supporting information permitting authorities should be required to submit as a part of a certification that a previous RACT analysis meets the RACT requirement for PM<sub>2.5</sub>. EPA's proposal recognizes that prior BACT/LAER/MACT determinations may reflect RACT.

EPA proposes that states fulfilling their Clean Air Interstate Rule (CAIR) emission reductions entirely through emission reductions from electric generating units (EGUs) will satisfy SO<sub>2</sub> and NO<sub>x</sub> RACT requirements for EGU sources. EPA does not address the fact that many EGUs will meet their CAIR requirements by purchasing allowances in other states, which will impose greater burdens on other categories of sources in the states where the EGUs are located.

### **NSR Program for PM<sub>2.5</sub> Direct Emissions and Precursors**

EPA proposes to establish NSR requirements for PM<sub>2.5</sub> direct emissions and SO<sub>2</sub> and NO<sub>x</sub> as PM<sub>2.5</sub> precursors. EPA proposes not to regulate VOC as a precursor to PM<sub>2.5</sub> for NSR and to only regulate ammonia on a case-by-case basis.

EPA proposes to establish the major source threshold for nonattainment pollutants as 100 tpy.

For PSD, it proposes to establish 100 tpy as a threshold for listed source categories and 250 tpy for all other source categories. Under subpart 4, the major source threshold for “serious” PM<sub>10</sub> nonattainment areas is 70 tpy. EPA rejects establishment of a 2-tier major source threshold scheme, consistent with its proposal to not establish a 2-tier classification scheme. As indicated above, EPA would consider the condensable portion of the emissions stream, as well as the filterable portion in determining whether the source exceeds the major source thresholds.

EPA proposes to establish a PSD significance threshold of 10 tpy. It bases the proposed threshold on its rationale for establishing the 15 tpy significance threshold for PM<sub>10</sub>. EPA proposes to establish significance thresholds for NO<sub>x</sub> and SO<sub>2</sub> of 40 tpy, the same as for the ozone and SO<sub>2</sub> standards. EPA proposes various options for satisfying the pre-construction monitoring requirement in the Clean Air Act. One option is for EPA to exempt all PM<sub>2.5</sub> sources from doing monitoring by determining that the existing PM<sub>2.5</sub> network is sufficient. Another option is to permit sources on a case-by-case basis to satisfy the pre-construction monitoring by demonstrating that the existing network is sufficient. EPA also proposes to establish significant monitoring concentrations which could be used to exempt a permit applicant from the pre-construction monitoring requirement. Another option is for EPA to provide an across-the-board exemption from pre-construction monitoring under existing sections 52.21(i)(5)(ii) and 51.166(i)(5)(iii) for PM<sub>2.5</sub> or any precursor for which a significant monitoring concentration has not been established.

EPA proposes to establish a one-to-one offset ratio for direct PM<sub>2.5</sub> emissions. It would establish the same ratio of offsets for precursors that are regulated as a part of the PM<sub>2.5</sub> nonattainment program; *i.e.*, as proposed, for NO<sub>x</sub> and SO<sub>2</sub>. EPA seeks comments on whether it should permit interprecursor trading to comply with the offset requirement.

EPA proposes to continue implementation of the 1997 guidance permitting the use of the PM<sub>10</sub> program as a surrogate for PM<sub>2.5</sub> during the time that the PM<sub>2.5</sub> PSD and nonattainment NSR SIPs are being developed.

Comments are due on January 3, 2006, but EPA has indicated its intent to extend this deadline by 15 days. Because of the proposal’s significance, numerous trade associations will be submitting comments on this proposal. □

## EPA Proposes NSR Emissions Test for EGUs

On October 20, 2005, EPA issued a proposal to revise the test for determining emissions increases for electric generating units (EGUs) under the federal NSR programs. 70 Fed. Reg. 61,081. EPA proposes to substitute the NSPS test under which emissions increases are determined by comparing “maximum achievable hourly emissions” before and after a change for the “actual-to-projected-actual” emissions increase test under the 2002 rules currently applicable to EGUs and other stationary sources. EPA seeks comment on a significant number of issues, but does not seek comment on whether the maximum achievable hourly emissions increase test should be established for all stationary sources, not just EGUs. EPA’s proposal only contains preamble language and EPA indicates that it later will issue proposed regulatory language for public comment.

EPA also issued an enforcement guidance memo in which EPA indicates that henceforth EPA will focus its enforcement against EGUs on actions “that would violate our NSR reform rules and our latest NSR utility proposal.” It appears that this new policy only relates to “coal-fired” utility units.

EPA’s justification for proposing to revise the test applicable to EGUs is tied, in substantial part, to the fact that many EGUs have been required to reduce their emissions significantly under the Acid Rain Program, Clean Air Interstate Rule, and Best Available Retrofit Technology (BART)

regulations. However, EPA puts forth other justifications for the proposed revision that would equally support making the NSPS-type “maximum achievable hourly emissions” test available for non-EGUs. In particular, EPA explains that the proposed test is a simple one to apply and that the actual-to-projected-actual test is complex and confronts sources with choices that can impede the construction of projects that can improve safety, reliability and efficiency.

EPA’s preamble contains an extensive legal analysis in support of the proposal. EPA reviews in detail the legislative and regulatory history of the adoption of the NSPS and NSR programs. The thrust of the rationale is that the NSPS regulations contained the proposed “modification” test prior to enactment of the NSR requirements in 1977, and thus EPA has the discretion to incorporate the NSPS-type test in the NSR programs for EGUs. EPA acknowledges that the D.C. Circuit in the 2002 NSR rule case found that EPA’s NSR emissions increase test must be based on “actual emissions,” but EPA asserts that the NSPS maximum achievable hourly emissions test is an actual emissions test because the maximum achievable emissions in the past five years for almost all EGUs are the same as their maximum achieved hourly emissions. EPA’s legal analysis is well-developed and persuasive, except in one respect: EPA continues to assert that the 1980 NSR regulations establish an “actual-to-potential” test, even though all reviewing courts have rejected this interpretation and EPA itself stated in the 2002 NSR rule case that this was simply a shorthand way of referring to the actual emissions increase test in the 1980 regulations.

In addition to seeking comment on the proposed emissions increase test, EPA’s preamble seeks comment on a number of alternatives and variations in how the proposed test would be incorporated in the current NSR regulations. These include the following:

- EPA seeks comment on two alternatives to the “maximum achievable hourly emissions” test:

1. a test based on “maximum achieved hourly emissions,” and
2. a test based on mass of emissions per unit of energy output before and after a change.

- EPA seeks comment on whether to revise the *NSPS* regulations to include a maximum achieved emissions test or an output-based emissions test, either in lieu of or in addition to the maximum achievable hourly emissions test. This would presumably only be done if the NSR regulations were revised to include a different test than is currently in the NSPS regulations.
- Under EPA’s NSR proposal, any increase in the maximum achievable hourly emissions would trigger NSR permitting and, as a result, the current major modification provisions under which there must be a significant net emissions increase would be eliminated. EPA asks for comment on whether it should, in addition to establishing the maximum achievable hourly emissions test, retain the significant emissions increase and significant net emissions increase provisions in the current NSR regulations.
- EPA asks for comment on whether its elimination of netting is justifiable under the *Alabama Power* decision, which held that netting is required under the PSD program and whether, if it retains the requirement to compute a net emissions increase, it should retain the current five-year contemporaneous netting provisions or shorten the period and allow only “project” netting in determining

whether an emissions increase will result.

- EPA proposes a broader definition of EGU than in the current NSR and NSPS regulations by providing that cogeneration facilities and simple cycle gas turbines would also qualify under the definition.

Non-EGU representatives intend to submit comments on the proposal indicating support for EPA's inclusion of an NSPS-type modification test in the NSR regulations, but strongly recommend that the test be included for all stationary sources, not just EGUs. The comments are expected to address a number of the issues on which EPA seeks public comment and specifically urge that EPA keep the actual-to-projected-actual emissions increase test as a "second-step" test that would only be applied if a project would have an increase in maximum achievable hourly emissions. EPA would need to issue a subsequent proposal to establish the hourly test for sources other than EGUs.

Non-EGU representatives are also expected to submit comments again on the fact that the 1980 NSR regulations did not provide for an "actual-to-potential" emissions increase test. EPA made a similar statement in the final rule preamble for the 2002 NSR rule reforms, and then defended that statement in the litigation as a "shorthand" statement of the test that is applicable and represented to the D.C. Circuit that this is not a statement of the test that is to be uniformly applied. As a result, the court's opinion indicates that it is "improbable" that EPA would take the position that the 1980 NSR rules does provide for an "actual-to-potential" test. Every court that has reviewed the 1980 NSR regulations has concluded that the actual-to-potential test is not permissible under the 1980 regulations except where the unit involved is a new unit or a unit that is so significantly changed that it could be considered a new unit. In the utility NSR enforcement cases, EPA initially argued that the regulations provide for an actual-to-potential test, but subsequently in oral arguments consistently argued that the court

should apply an "actual-to-projected-actual" test. EPA will be asked to, at a minimum, explain in future preambles the current state of case law and its own litigation positions which support application of an "actual-to-actual" test under the 1980 regulations. □

## Second Circuit Issues Decision Addressing Important Title V Issues

On October 24, 2005, the Second Circuit Court of Appeals issued a decision addressing several important Title V issues. *New York Public Interest Research Group (NYPIRG) v. Johnson*, Nos. 03-40846(L), 03-40848(CON). NYPIRG's principal challenge was to EPA's decision not to object to issuance of Title V permits to power plants which had been issued a notice of violation (NOV) finding that the plants had violated the PSD permitting requirements. The court vacated EPA's decision, finding that (1) EPA was required to object to the proposed permits because the permitting authority did not include PSD emission limits; and (2) the issuance of the NOV required that a compliance schedule be established for addressing the violations alleged in the NOV. The court also held that semiannual reporting of opacity and other emission deviations did not comply with the "prompt reporting" requirement of Title V. The court accepted EPA's position that quarterly reporting of SO<sub>2</sub> and NO<sub>x</sub> deviations was permissible as "prompt reporting."

### Factual Background

In May 2000, the New York Department of Environmental Conservation (DEC) issued a NOV to the Huntley and Dunkirk power plants owned by NRG Energy, stating that the plants had been modified without obtaining PSD permits. The plant changes targeted by the NOV primarily included replacement of components in the power plants. DEC issued the plants' Title V permits without any reference to the PSD NOV. NYPIRG submitted comments asserting that the

Title V permits should include PSD limits and a compliance schedule. DEC responded that the final determination of PSD applicability had not been made and that neither PSD limits nor a compliance schedule was required to be included in the permits. After DEC issued the proposed permits, NYPIRG petitioned EPA to object to the Title V permits. EPA denied NYPIRG's petition on the grounds that it was not necessary to include PSD limits or a compliance schedule until a final determination of PSD applicability was made. Subsequently, DEC brought an enforcement action in federal district court alleging that the plants were in violation of the PSD requirements.

NYPIRG also petitioned EPA to object to reporting provisions in the Title V permit, alleging that they did not comply with the "prompt reporting" requirements of Title V. The permit provided for quarterly reporting for SO<sub>2</sub> and NO<sub>x</sub> emissions and opacity data. All other reporting was to be done semiannually. EPA also denied this objection request.

### **Demonstration of PSD Non-Compliance**

The threshold issue that the court addresses is whether the issuance of the NOV constitutes a sufficient finding of a violation to require that the "violation" be addressed in the Title V permit. EPA explained that the NOV is, by its nature, only "accusatory," rather than a conclusive document. Since litigation had not been concluded, the nature of PSD requirements, if any, could not be determined. The court rejected EPA's position and held that "the DEC's issuance of these NOVs and commencement of the suit is a sufficient demonstration to the Administrator of non-compliance for purposes of the Title V permit review process." Slip op. at 11. The court then reviews the authority of EPA and DEC to initiate enforcement actions and, amazingly, finds significance in the fact that both federal and state law provide for "direct enforcement for a 'violation' – not merely for allegations." *Id.* at 13.

The court next asserts that "the DEC, as the administering agency, has a certain expertise which

distinguishes its NOVs and complaints from, for instance, allegations by a private citizen or by a non-profit organization." The court later states that:

The access guaranteed to the DEC, its authority to find and remedy violations, and the specificity of its NOVs and complaints, all indicate that the DEC can not reasonably claim to be uncertain as to what emission limits apply to the Huntley and Dunkirk plants.

*Id.* The court further states that "[s]ince we are confident that the DEC does not issue NOVs lightly, we see no reason why its findings for purposes of issuing NOVs . . . do not suffice to demonstrate non-compliance for purposes of objections" under Title V.

The court rejects EPA's position that it is "premature to include PSD limits in a permit before they are determined by the permitting authority to be applicable." It states that "[i]t is not premature, precisely because we believe that the DEC, in issuing the NOVs and filing suit, has determined that these standards are, indeed, applicable." The court finds EPA to be in the "rather strange role of minimizing – if not outright denying – the legal significance of the DEC's NOV and complaint." The court then makes a modest concession to the reality that PSD limits have not been determined to be applicable, stating that "we are not called on to determine whether it is reasonable for the EPA to exclude contested PSD limits from permits when the permitting authority has not yet determined those limits applicable – [because] this case does not present that problem."

The Second Circuit nowhere discusses the body of case law that has developed over time, which has addressed whether NOVs represent a final determination that a violation has occurred. In these cases, courts consistently find that an NOV is not a "final agency action." Obviously, the importance of conducting adjudicatory proceedings from which an appeal is authorized is

particularly critical when the violation allegations involve New Source Review. The court's opinion reflects a total lack of appreciation for the complexity of NSR and the uncertainty regarding how proceedings that ensue following issuance of NSR NOV's will be resolved.

### **Permit Compliance Schedule**

Having concluded that the NOV reflected a final determination of a PSD violation, the court then addressed NYPIRG's claim that EPA should have granted its request for an objection on the grounds that the permit did not include a compliance schedule addressing the PSD NOV. Here again, the court states that "[i]ssuance of a NOV indicates that the DEC has concluded that a source is non-compliant." *Id.* at 15. The court then, with little additional analysis, holds that "[f]or essentially the same reasons we concluded that it was unreasonable for the EPA to discount the NOV and complaint as evidence that the source was in violation of the Act, we also conclude that it was inconsistent with the Act for the EPA to deny NYPIRG's petition insofar as it complained of the absence of a compliance schedule." The court then notes that EPA had required compliance schedules "in similar past situations," specifically referencing EPA's objection to a permit Kentucky issued to the Gallatin Steel Company without a compliance schedule. *Id.*

### **Prompt Reporting of Deviations**

The court next addressed whether reporting of deviations quarterly for certain requirements and semiannually for others complied with the requirement for "prompt reporting" under Title V. EPA responded to NYPIRG's objection by first pointing out that the permitting authority has discretion to define promptness for each particular source. EPA indicated that the quarterly reporting "is efficient and more prompt reporting would not lead to greater compliance." In defense of the semiannual reporting requirement, EPA argued that the fact that "two separate provisions require reporting" does not mean that "their timing cannot coincide."

The court explains that DEC does have authority to define "prompt" in permits and need not establish one standard of prompt to be used consistently in all permits. However, the court states that quarterly reporting "certainly contradicts both Congress' explanation of prompt as meaning 'without delay,' . . . as well as the EPA's own explanation of prompt as two to ten days." Clean Air Act Proposed Interim Approval of Operating Permits Program: State of New York, 61 Fed. Reg. 36,617-02, 39,619 (July 30, 1996).

The court then reviews the quarterly reporting requirements for SO<sub>2</sub> and NO<sub>x</sub>. The court notes EPA's justification for SO<sub>2</sub> quarterly monitoring, which was tied to the unlikelihood that fuel oil outside of specifications would be delivered and used. The NO<sub>x</sub> justification was tied to the fact that the plants are subject to limits for five facilities considered together, not individually. The court accepted EPA's finding that quarterly reporting for SO<sub>2</sub> and NO<sub>x</sub> is "prompt," and granted *Chevron* deference to EPA's position.

The court rejected EPA's justification for quarterly reporting of opacity requirements. It indicates that EPA justified quarterly reporting on the grounds that "heightened reporting would not heighten compliance." *Id.* at 20. The court indicated that the purpose of prompt reporting is "not exclusively to ensure compliance," but "to alert the EPA and the public to emissions violations." The court then pointed out that the plants had a "rich history of violating opacity requirements." Based on the history of non-compliance, the court indicated that EPA had failed to demonstrate reasonableness and remanded the opacity quarterly reporting requirements to EPA "to determine reporting requirements consistent with the Act's promptness mandate." *Id.*

The court next considered whether semiannual reporting of deviations of other requirements complied with the Title V prompt reporting requirement. The court gave short shrift to EPA's position that, even though the semiannual

monitoring requirements and prompt reporting requirements are contained in two separate provisions, their timing may permissibly coincide. The court holds that “[t]o give both provisions meaning, prompt must be interpreted at the very least as with greater speed than every six months.” *Id.* at 21.

### EPA Response to Decision

EPA is considering whether to file a petition for rehearing *en banc* because of the significance of the adverse rulings on each of the three principal issues addressed by the court. Industry representatives have strongly encouraged EPA to seek rehearing. □

### EPA Issues Final PSD NO<sub>2</sub> Increment Rule

On October 12, 2005, EPA issued its final rule that addresses its re-evaluation of the PSD increments for NO<sub>2</sub> that were first established in 1988. 70 Fed. Reg. 59,582. EPA opted to retain the existing increment system, concluding that the original NO<sub>x</sub> PSD requirements satisfied the statutory criteria in section 166(c) and (d) of the Clean Air Act.

In its proposal, EPA also asked for comment on two other options: (1) to allow states to use a cap and trade program in lieu of an increment system, specifically focusing on allowing the PSD requirements to be satisfied by implementing the model cap and trade program for electrical generating units contained in EPA’s Clean Air Interstate Rule (CAIR); and (2) to allow states flexibility to use a state planning approach in lieu of an increment system. EPA does not specifically approve either of these options. However, EPA amends the text of its PSD regulations to make clear that states may seek EPA approval of SIPs that use an alternative approach to NO<sub>2</sub> increments, if the state can demonstrate that the alternative program satisfies the requirements of section 166(c) and (d) and prevents significant deterioration from the

emissions of NO<sub>x</sub>. EPA also indicates that it continues to see promise in using a cap and trade approach modeled on the CAIR to meet the goals of the PSD program for NO<sub>x</sub> and intends to publish a supplemental notice of proposed rulemaking that would build on the cap and trade option on which it sought comment in the proposal. □

### EPA Proposes Reporting Exemption for NO<sub>x</sub> Emissions

On October 4, 2005, EPA published a notice proposing to establish a new administrative exemption from reporting requirements under CERCLA and EPCRA. 70 Fed. Reg. 57,813. Under current law, releases of NO<sub>x</sub> emissions of 10 pounds or more per 24 hours that are not “federally permitted” are subject to the reporting requirements under these two statutes.

EPA proposes that releases of less than 1000 pounds of nitrogen oxide and nitrogen dioxide (collectively “NO<sub>x</sub>”) in 24 hours that is a result of combustion activities, unless the release is a result of an accident or malfunction, be exempted from the CERCLA/EPCRA reporting requirements. EPA also asks for comments on two alternative options. Under one option, EPA would interpret the “continuous release” reporting provisions to be broad enough to cover 1000 pound NO<sub>x</sub> release notifications. Under the other option, EPA would extend the proposed administrative reporting exemption to include all NO<sub>x</sub> releases from combustion sources, excluding accidents and malfunctions. EPA indicates that commenters wishing to support an extension of the administrative reporting exemption beyond the proposed amount of less than 1000 pounds per 24 hours must submit a human health and ecological risk assessment to support extending the exemption to include all NO<sub>x</sub> releases from all combustion sources.

Comments are due on the proposal by December 5, 2005. □

## EPA Takes Action on BEN Model Proposal

On August 26, 2005, EPA issued a notice taking final action on issues that it had raised on calculation of the economic benefit that sources obtain as a result of not complying with environmental requirements. 70 Fed. Reg. 50,326. EPA makes this calculation in connection with negotiations of settlements of enforcement actions. EPA's enforcement staff use the BEN computer model to perform economic benefit calculations. EPA requested comments on both the BEN model, as well as other overarching benefit recapture issues.

A key part of EPA's civil penalty policies is that the Agency insists on at least recapturing the economic benefit that a source may have gained from alleged unlawful activity. EPA's civil penalty policies contain two basic components: a gravity component and an economic benefit component. Each civil penalty policy contains a methodology for determining the gravity component which is to reflect the seriousness of the violation.

EPA's economic benefit component is intended to determine benefits that can accrue in three ways: (1) delaying necessary pollution control expenditures; (2) avoiding necessary pollution control expenditures; and/or (3) obtaining an illegal competitive advantage. The BEN model is used to calculate economic benefits derived from delayed and/or avoided costs, but EPA has no methodology for determining benefits gained from illegal competitive advantage to the extent that they exceed the benefits derived from delayed or avoided costs.

EPA sought comment on three categories of issues: (1) broad economic benefit recapture questions; (2) the BEN model's calculation methodology and assumptions; and (3) the model's user-friendliness.

### **Broad Economic Benefit Recapture Issues**

EPA requested comment on two broad economic benefit recapture issues: (1) whether another approach existed that would be simpler and at least as accurate as the BEN model in calculating the economic benefit from delayed and/or avoided pollution control expenditures; and (2) whether a methodology existed for determining illegal competitive advantage where it is not accurately represented by the delayed and/or avoided costs. EPA's final notice indicates that no one suggested a substitute economic model for the BEN model, and that no systematic way was identified for determining illegal competitive advantage. EPA indicates that, where the delayed and/or avoided cost determined through the BEN model does not sufficiently reflect the recapture of economic benefit based upon illegal competitive advantage, EPA will formulate an analytical approach that will attempt to capture the full extent of the benefit.

### **BEN Model's Calculation Methodology**

Industry representatives have long advocated changes in a number of aspects of the BEN model. EPA's action on key issues is indicated below.

**Depreciation Method.** One of the complaints about the BEN model is that, in some instances, the model calculates depreciation over a longer period than is appropriate. In response, EPA devised a means for BEN to apply a shorter depreciation schedule when the user enters a capital equipment use for life less than ten years.

**Tax Rates.** The BEN model historically has contained limited assumptions regarding applicable federal and state tax rates. In response to comments, EPA has revised the model to provide for use of accurate federal and state tax rates.

**Inflation Treatment.** One of the principal complaints about the BEN model is that it

previously has used a standard-value rate calculated from the prior ten years of inflation data from the Plant Cost Index. In response to comments, the revised BEN model will use actual historical inflation information using a table of cost index values. In addition, however, the model will also allow the user to override the default cost index and specify different cost indices.

***Discounting/ Compounding Methodology.***

EPA investigated possible changes to the discounting/compounding methodology in the BEN model, but after reviewing a number of alternatives, retained the current basic discounting methodology, which is based upon the ten-year after-tax weighted average cost of capital.

**Improving the BEN Model's User-Friendliness**

EPA also reviewed whether the BEN model is complex to operate and requires information that is difficult or expensive to obtain. EPA concluded that no changes were required. The model will continue to be operated using Windows. EPA also concluded that the information required is sufficiently readily available. □