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EPA Issues First Air Toxics Residual Risk Rule

On April 15, 2005, EPA published the first final residual risk rule under section 112(f) of the Clean Air Act, which regulates the coke oven batteries source category. 70 Fed. Reg. 19992. The final rule also addresses the 8-year review requirement for MACT standards under section 112(d)(6). Because this residual risk rule is the first EPA has promulgated, it contains a number of policy decisions that will be relevant for all future residual risk standards. Key decisions addressed in the final rule preamble are briefly summarized below.

Overview of Residual Risk Standard-Setting Process

EPA first addresses the basic criteria that must be applied in setting residual risk standards. Under section 112(f)(2), EPA must determine for each section 112(d) source category if the promulgation of additional standards is required "in order to provide an ample margin of safety to protect public health." EPA also has the discretion to impose a more stringent emissions standard to prevent adverse environmental effects if such action is justified in light of costs, energy, safety, and other relevant factors.

As required under the Benzene NESHAP decision framework codified in section 112(f)(2)(A) and (B), EPA considered whether the level of maximum individual risk (MIR) from the limits in the MACT standard it adopted (200 in a million) are acceptable. After considering several factors, EPA concluded that the MIR is an acceptable risk. These factors included the number of exposed people with cancer risk level estimates greater than 1 in a million (approximately 300,000 people or 7% of the exposed population), the number of people for whom cancer risk levels are greater than 100 in a million (less than 10 people), the estimate of annual incidence of cancer (0.04), and the projected absence of adverse non-cancer effects. Also, EPA considered the protective nature of many of the assumptions leading to these estimates of potential residual risk.

EPA also points out that a condition precedent to issuing its first residual risk rule was its issuance of revised cancer guidelines under section 112(o)(7). Based upon such recently-issued guidelines, it applied default factors in the risk assessment in support of the final rule. The effect of the cancer guidelines and supplemental guidance was to adjust risk estimates upward, although EPA indicates that the risk increases were tempered by consideration of other protective assumptions in the risk assessment. EPA also re-examined its decision as to the level of control to provide an ample margin of safety and, as a result, reduced the MIR to 270 in a million and the number of people having excess lifetime cancer risks of greater than 1 in a million by approximately 200,000.

Determination of Ample Margin of Safety

Section 112(f)(2)(A) requires EPA to promulgate standards if the "lifetime excess cancer risks of the individual most exposed to emissions from a source in a category or subcategory" is greater than 1 in a million. One commenter argued that EPA must reduce the lifetime risk to a single individual most exposed to emissions from any

one of the sources in the source category to less than 1 in a million. EPA confirms that the Act does not establish what the level of the standard must be and that the risk level in section 112(f)(2)(A) is a "trigger" for standards for non-threshold pollutants. Instead, EPA is to apply the two-step formulation under the Benzene NESHAP under which it first determines an acceptable risk level and then determines an ample margin of safety.

In establishing an ample margin of safety, EPA points out that it is authorized to consider costs in making the determination, although it is not to consider costs in determining an acceptable level of risk. EPA also considers other factors in determining an ample margin of safety. These include estimates of individual risks, incidence, numbers of exposed persons within various risk ranges, scientific uncertainties, weight of evidence, as well as potential standards' technical feasibility, costs and economic impact.

Co-Located Sources and Facilitywide Risk

EPA points out that a major question is what are the possible sources of exposure that it should consider in making its initial assessment of residual risk from a source category. After pointing out six possible ways for considering exposure, EPA concludes that "the sound policy embodied in the Benzene NESHAP" remains the approach that EPA should follow in determinations under section 112(f). At the first step, when determining "acceptable risk," EPA will consider "public health risks that result from emissions from the source category only." EPA points out that this interpretation is supported by the text of the Act and prior regulatory practice and that the Agency is "impressed and daunted at the practical problems of implementing a compulsory facilitywide examination." EPA states that a floor statement of Senator Durenberger indicating that EPA should consider risks from an entire facility is not sufficient evidence of Congressional intent to justify a different conclusion.

However, EPA states that it is not precluded from considering emissions other than those from the source category or sub-category entirely. Rather, EPA indicates that it "must still determine whether additional reductions should be required to protect public health with 'an ample margin of safety.'" EPA believes that one of the "other relevant factors" that may be considered in the second step of its analysis is co-location of other emission sources that augment the identified risk from the source category.

Actual Versus Allowable Emissions Rates

EPA states that it believes it may evaluate potential risk based on consideration of both actual and allowable emissions. As it points out, allowable emissions are the maximum level that sources could actually emit and still comply with the MACT standards. Thus, modeling this level of emissions is inherently reasonable for evaluating maximum potential risks associated with current standards. However, EPA points out that it is also reasonable that it should consider actual emissions, when available, as a factor in both steps of the residual risk standard determination (i.e., determining both risk acceptability and ample margin of safety).

Exposure Duration

EPA uses a 24-hour per day exposure over a 70-year lifetime to estimate individual and population cancer risks for refined risk assessments. EPA acknowledges in the preamble that the assumption that people may be present at their homes for 24 hours per day over a 70-year lifetime represents "a scenario that likely overestimates the actual exposures received by people living near the facilities." EPA indicates

that it is currently developing a methodology that will allow it to consider a variety of parameters (e.g., residency time, socio-economic conditions, age distribution, demographics, size of the census block) that could affect exposure and risk to individuals in populations that live in the vicinity of facilities. It is also investigating whether similar probabilistic techniques can be applied to the MIR to develop meaningful alternative metrics of individual risk. However, EPA indicates that it does not have sufficient information to apply any of these factors to coke oven facilities.

8-Year MACT Standard Review

EPA addresses two principal issues in determining how it will carry out its 8-year review of MACT standards under section 112(d)(6):

(1) Whether its review must include a new analysis of the MACT floor for existing sources; and

(2) Whether the 8-year review is satisfied by establishment of standards under section 112(f) that provide an ample margin of safety.

EPA concludes that it is not required to carry out a new analysis of the MACT floor. EPA points out that it is to review and "revise as necessary" MACT standards "taking into account developments in practices, processes, and control technologies." It states that there is no indication that Congress intended that the 8-year review requirement "inexorably force existing source standards progressively lower and lower in each review cycle, the likely result of requiring successive floor determinations."

With regard to the relationship between residual risk standards and the 8-year review requirement, EPA concludes that the 8-year review under section 112(d)(6) applies "only to" MACT standards. However, EPA states that findings that underlie residual risk standards should be "key factors" in making any subsequent 8-year review determination. EPA points out that, if the section 112(f) standard was not based at all on the availability or cost of particular control technologies or if an ample margin of safety analysis shows that the remaining risk for non-threshold pollutants falls below 1 in a million and for threshold pollutants falls below a similar threshold of safety, then no further revision of MACT standards would be needed because, in either event, an adequate margin of safety would be assured. ″

EPA Office of Inspector General Issues Report on Title V Program

The EPA Office of Inspector General (OIG) issued a report in March 2005 titled "Substantial Changes Needed In Implementation and Oversight of Title V Permits If Program Goals Are To Be Fully Realized." The OIG indicated that the objectives of their evaluation were to determine whether:

- Selected Title V permits were clear and contained adequate provisions consistent with key Title V requirements.
- EPA's Title V oversight and guidance provided to state permitting authorities contributed to improving the implementation of Title V.
- The Title V program has achieved its Congressionally-mandated goals of improving the implementation and enforcement of the Clean Air Act.

In conducting its investigation, the OIG interviewed officials from EPA headquarters, environmental and industry groups, key air and

enforcement officials in all 10 EPA regions, and state permitting authorities (although there was very little interaction with industry representatives). In addition, research and review was carried out of literature on Title V, citizen petitions, law suits on Title V, EPA and state guidance on Title V, and 40 selected permits in New York, North Carolina, Ohio, and Texas.

The report reaches a number of broad conclusions and makes a number of recommendations. In general, consistent with its title, the report finds that the adequacy and completeness of Title V permits needs improvement, and EPA oversight could be more effective. The report also concludes that the program has been partially successful in improving implementation of the Clean Air Act. In addition to setting out the OIG recommendations, the report also includes EPA's response to the recommendations. EPA's responses provide a good distillation of EPA's views on key Title V issues. Summarized below are recommendations that are particularly noteworthy and EPA's responses to them.

Recommendation 2-1. Develop and issue guidance on annual certification content which requires responsible officials to certify compliance with all applicable terms and conditions of the permit.

EPA's Response: Although several EPA regions agree with the recommendation, the Office of Air and Radiation (OAR) in headquarters disagrees with the recommendation that rulemaking guidance is needed to clarify that responsible officials must certify compliance with all applicable terms and conditions of the permit. EPA points out that the rules already require the identification of each permit deviation. Also, sources experiencing deviations from their permit terms must certify intermittent compliance. EPA agrees that states should develop forms that are consistent with the rules, but expects variations in format due to flexibility in the rules "which allows the required information to be cross-referenced from the permit or previous reports." EPA is concerned that new guidance may undercut existing state programs and concludes that there is "little or no evidence of a fundamental problem with annual compliance certifications."

Recommendation 2-3. Develop nationwide guidance on the contents of statements of basis (SB) which includes discussions of monitoring, operational requirements, regulatory applicability determinations, explanations of any conditions from previously issued permits that are not being transferred to the Title V permit, discussions of streamlining requirements, and other factual information, including a listing of prior Title V permits issued to the same applicant at the plant, attainment status, and construction, permitting, and compliance history of the plant.

EPA's Response: Although several regions agree with the recommendation, the Office of Air and Radiation in headquarters disagrees with the recommendation that additional guidance is needed to improve the adequacy of SBs. OAR believes that EPA's position is adequately stated in EPA's responses to citizen petitions on state programs and permits.

Recommendation 2-4. Through its periodic grant discussions with EPA regions and state and local permitting authorities, emphasize improvements in Title V permit clarity by minimizing using incorporation by reference, clearly citing underlying regulations, emphasizing concisement in permit format, and using statements of basis to identify and explain permit decisions related to streamlining.

EPA's Response: EPA disagrees with the recommendations on the grounds that section 105 grant funds cannot be used for Title V programs. It is notable that, in responding to Recommendation 2-1, EPA supports using incorporation by reference in compliance certifications; however, it does not express an opinion on using incorporation by reference in Title V permits.

Recommendation 2-5. Expeditiously follow through on its commitment in the January 2004 umbrella monitoring rule to develop periodic monitoring guidance.

EPA's Response: EPA agrees with the recommendation and points out that it is developing a notice and comment rulemaking to provide guidance on periodic monitoring. EPA states that the rule will address "when the requirements for periodic monitoring in Title V rules are triggered to improve monitoring in underlying emissions standards and rules, and when it is triggered, how to create periodic monitoring in the permit." EPA stated that it hopes to propose this rule in early 2005.

Recommendation 2-7. Establish and implement a plan to review the adequacy of monitoring provisions in SIPs.

EPA's Response: EPA indicates that it agrees with this recommendation and points out that it has developed an advance notice of proposed rulemaking seeking comments that identify inadequate monitoring in underlying emissions standards and rules, including SIP rules. EPA indicated that it has not decided what its next step should be, although it indicates that it is likely that "if the outcome of this process demonstrates a need," EPA would initiate "one or more future notice and comment rulemakings to correct any inadequate monitoring."

Recommendation 2-8. Ensure that state and local permitting authorities consistently apply periodic monitoring provisions to all applicable permit requirements, and ensure that permitting authorities use AP-42 emissions factors in permits only after more reliable methods for determining compliance have been considered.

EPA's Response: EPA disagrees with this recommendation. EPA points out that it is important for "the best information" to be used by states in specifying compliance determination methods and that sometimes AP-42 emissions factors are the best that is available. Two EPA regions also commented that there must be limits in place "to avoid excessive oversight of all permits by EPA."

Recommendation 3-2. Issue the four draft Title V program guidance and rules developed by OAQPS and submitted for approval in 2002.

EPA's Response: With the exception of a rule dealing with how EPA addresses notices of deficiencies to permitting authorities, EPA disagrees with the recommendation. With regard to "permit renewal application forms guidance," EPA indicates that this guidance is no longer needed because Region IV has approved a rule in Kentucky that allows for streamlining of renewal applications and indicates that this "provides guidance that can be applied nationally." With regard to "annual compliance certifications guidance," EPA indicates that the original draft guidance prepared over two years ago is now out of date and was not reviewed by EPA management due to competing priorities with New Source Review. EPA indicates that, if the guidance were to be prepared now, it would need to come in the form of a notice and comment rulemaking and that there are no plans to undertake such a rulemaking. With regard to "processing program revisions guidance," EPA indicates that the lack of any recent request for such guidance indicates that it is not needed.

Recommendation 3-3. Provide a document guide on the EPA public website which would assist the public in identifying and locating published EPA statements on key Title V program issues.

EPA's Response: EPA disagrees with this recommendation and indicates that it believes that the OAQPS Technology Transfer Network, the designated repository for OAR policy and guidance, and the Region VII database for regional materials are adequate. EPA did not directly address whether it agrees with the thrust

of the OIG recommendation that EPA's databases should be made more "user friendly."

Recommendation 3-4. In conjunction with EPA Regional Administrators, jointly develop a strategy to ensure that EPA regional oversight and review of Title V permit adequacy continues beyond the scheduled program evaluations. EPA regional review of permits should include an analysis of clarity-related issues and appropriate inclusion of CAM and MACT provisions in any permit renewals.

EPA Response: EPA agrees that long-term oversight of Title V implementation is needed. It indicates that it will use its current 4-year analysis of Title V programs as a baseline for developing 5-year plans that combine oversight with permit review and audits to ensure continued proper implementation. The OIG report asserts that factors such as extensive use of incorporation by reference, failure to "fully" cite applicable regulations, complex permit format, and lack of detail in source requirements for testing, monitoring and reporting had a negative impact on permit clarity.

Recommendation 3-5. In conjunction with EPA regional administrators, jointly coordinate and streamline the review and response process for Title V public petitions to meet the response requirement specified in the Clean Air Act.

EPA's Response: EPA indicates that there are many case-specific reasons why permit responses can exceed 60 days. EPA indicates that it will devise a procedure to reduce response times, implement the procedure and track the impact on shortening the process.

The OIG's heavy reliance on discussions with 10 environmental groups and staff in EPA's 10 regions has resulted in recommendations that, in many instances, are responsive to environmentalists concerns and often would impose unnecessary burdens on Title V sources and permitting authorities. Overall, however, the responses of OAR headquarters reflects a reasonably balanced perspective regarding the relative benefits and costs of activities imposed under Title V. ▪

Ohio Appeal Commission Overturns Operational Restrictions in Title V Permit

On March 1, 2005, the Ohio Environmental Review Appeals Commission issued an opinion overturning operational restrictions in the Title V permit of a General Electric Lighting (GEL) facility, which had been established for the purpose of assuring compliance with a particulate emissions limitation. Case No. ERAC 185017. In a motions ruling on August 21, 2003, the Commission had found that the Ohio EPA had not exceeded his authority by imposing operational restrictions to assure compliance with the limitation. In the March ruling, the Commission found, however, that the specific restriction that was established was unreasonable because the facility could operate in compliance with the emissions limitation during times that it was operating outside the permissible ranges included in the operational restriction.

The GEL facility is subject to a particulate emissions limit of 0.2 pounds of particulate matter per ton of glass produced. The facility's Title V permit required it to conduct an emissions test and provided for a limit on power sent to GEL's electrostatic precipitator to be based on the test. Specifically, GEL was required to maintain voltage and current within the range of values recorded during the test. GEL presented expert testimony which demonstrated that the facility could operate in compliance with the particulate emissions limit at times that it would operate outside the range of voltage and current levels that had been established based upon its emissions test. The Ohio EPA was unable to

present testimony that refuted the testimony of GEL's expert witness.

The relevant Ohio statutory provision states that the Commission is to vacate or modify the permitting agency's action if the Commission finds it to be "unreasonable or unlawful." The Commission pointed out that it is to accord "considerable deference" to the agency's interpretation of its rules. It pointed out that in its earlier ruling, it had concluded that the establishment of operational restrictions in Title V permits is generally lawful, but that the operational restriction "'*must actually be designed to assure compliance with the underlying applicable requirement* (in this case mass emissions limitations).'" Final Order at 16-17 (citation omitted). It further stated that "'the inclusion of any operational restriction which can be *demonstrated to directly relate to the enforceability of an existing applicable requirement* and which does not alter that underlying requirement is lawful.'" *Id.* It stated, however, that the permitting agency could not impose a restriction which, in reality, has "'the effect of directly or indirectly modifying or amending the underlying applicable requirement.'"

After reviewing the evidence presented, the Commission ruled that the relevant empirical data "clearly and unequivocally established that the prescribed power ranges do not directly relate to the enforceability of the particulate emissions requirement." Accordingly, the Commission ruled that the operational restriction was "unreasonable." "

Tennessee Court Dismisses NSR Claims Against TVA

In March 2005, a federal district court ruled that claims brought by environmental groups alleging that a major overhaul project at TVA's Bull Run plant in 1988 are barred by the five-year statute of limitations. *National Parks Conservation Ass'n, Inc., et al. v. TVA*, Case No. 3:01-CV-71 (E.D. Tenn.). The Court found that claims for both civil penalties and injunctive relief were time-barred. A substantial majority of courts have ruled that the five-year statute of limitations precludes PSD claims for civil penalties for projects undertaken more than five years ago, but it is rare for a court to rule that claims for injunctive relief for such projects are barred as well.

The principal factual issue addressed by the Court was whether the Tennessee PSD program is only a preconstruction permit program or whether it is an operating permit program as well. After reviewing the history of the State's PSD preconstruction program and its operating permit program, the Court concluded that the permit programs were separate and distinct and not a single program. The Court pointed out that construction permits are effective for only a limited period of time and, after construction is completed, sources are required to obtain an operating permit.

Continuing Violation

The Court first reviewed the PSD case law history in which the issue of the applicability of the five-year statute of limitations has been addressed. The Court pointed out that TVA claimed that the statute of limitations barred plaintiffs' claim for civil penalties because the cause of action accrued in 1988 when TVA failed to obtain a preconstruction permit. The environmental group plaintiffs asserted that TVA's alleged violations were ongoing, continuing violations and thus they would be entitled to seek civil penalties for the last five years. After reviewing the case law considering whether the failure to obtain a PSD preconstruction permit is a continuing violation, the Court pointed out that the majority view is that such violations are not continuing ones where state programs involve a

separate construction and operating permit scheme. The Court indicated that the *Duke Energy* decision, in which another federal court had found claims for civil penalties to not be time-barred, involved the States of North Carolina and South Carolina, which have integrated construction and operating permit programs.

Discovery Rule

Next, the Court considered whether TVA's statute of limitations defense failed because of the discovery rule, *i.e.*, the statute of limitations does not begin to run until the injured party discovers or reasonably should have discovered the harm. The Court pointed out that the only Clean Air Act case to address the issue had rejected application of the discovery rule. After reviewing that case, the Court also concluded that "the discovery rule does not allow plaintiffs to circumvent the statute of limitations."

Concurrent Remedy Rule

The final issue addressed by the Court was whether the environmental group plaintiffs' claim for injunctive relief and declaratory judgment should be dismissed under the "concurrent remedy rule." Under this doctrine, equitable remedies are barred because the plaintiffs' legal remedy (the claim for civil penalties) is time-barred. Plaintiffs and TVA agreed that the statute of limitations itself does not apply to the claims for injunctive relief. Plaintiffs argued that they "stand in the shoes of the EPA" to enforce the Clean Air Act and therefore the concurrent remedy rule does not apply, just as it would not apply if the government brought the case. The Court pointed out that plaintiffs' claims all arise from the Clean Air Act and, thus, if plaintiffs were successful, they would recover both legal and equitable relief for the same alleged violation of the Act. Under this circumstance, the Court concluded that, because it had determined the civil penalties claim to be time-barred, plaintiffs "should not be permitted to avoid the statute of limitations by seeking declaratory or injunctive relief." Citing another decision, the court stated that "to hold otherwise would allow the plaintiffs to 'mak[e] a mockery of the statute of limitations by the simple expedient of creative labeling'" (citation omitted).

Accordingly, the Court dismissed the environmental group plaintiffs' claim for declaratory and injunctive relief, as well as their claim for civil penalties. ″