

MACT Program Description

May 12, 1998

Background

Section 112(g)(2)(B) of the Clean Air Act establishes construction and reconstruction requirements for major sources of hazardous air pollutants (HAPs). After the effective date of a State's Title V operating permit program, no person may construct or reconstruct major HAP sources unless maximum achievable control technology (MACT) emission limitations will be met. The MACT emission limitations must be determined on a case-by-case basis, by the Administrator of the U.S. Environmental Protection Agency (EPA) or the State permitting authority if an applicable MACT emissions limitation has not been promulgated by the Administrator. 42 U.S. C.A. § 7412(g)(2)(B).

On December 27, 1996, EPA published the "Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources" final regulation to implement the requirements of Section 112(g)(2)(B). 61 FR 68384. These provisions, set forth in 40 CFR §§ 63.40-63.44 must be implemented no later than 18 months from the date of publication of the regulations in the Federal Register. The Section 112(g)(2)(B) program requirements govern only the construction or reconstruction of major sources and provide for the application of MACT for the control of emissions of listed HAPs from newly constructed or reconstructed major sources for which EPA has not yet established MACT standards under Section 112(d) of the Clean Air Act. The Section 112(g) program does not currently apply to modifications of existing sources. Section 112(g) requires state and local agencies to set HAP emission limits, based on case-by-case determinations, at the same level that will be established by the final MACT standard for the respective source category. Pursuant to 40 CFR § 63.43(j), the effective date of a case-by-case MACT determination shall be the date the Notice of MACT Approval becomes final, the date of issuance of a Title V permit incorporating the MACT determination or the date of any other notice of approval of the determination. 40 CFR § 63.43(j). Upon start-up of a constructed or reconstructed major source which is subject to the requirements of Section 112(g)(2)(B), the owner must be in compliance with the applicable requirements specified in the MACT determination. 40 CFR § 63.43(k).

Whenever MACT standards or requirements are subsequently promulgated by EPA under Sections 112(d), 112(h) or 112(j) of the Clean Air Act, the owners or operators of constructed or reconstructed major sources must comply with the promulgated MACT standard according to the compliance schedule included in the subsequent MACT standard. However, if no compliance schedule is included in a promulgated MACT standard, the Pennsylvania Department of Environmental Protection (PADEP) will establish a compliance date in the permit that assures that the owner or operator will comply with the promulgated standard as expeditiously as practicable but not later than 8 years after the date of promulgation of the standard. 40 CFR § 63.44(b)(1) and (2).

Legal Authority to Adopt a Section 112(g) Program

The Department of Environmental Protection (Department or PADEP) has sufficient legal authority to implement and enforce case-by-case MACT determinations through its permitting program including Title V permits, "State-only" permits, and plan approvals.

Statutory Authority

Section 6.6 of the Air Pollution Control Act (APCA) establishes the statutory framework for the implementation and enforcement of MACT standards and ensures that performance or emission standards included in permits and plan approvals issued by PADEP are at least as stringent as Section 112 requirements. Section 6.6(a) of the Air Pollution Control Act (APCA) provides that "the regulations establishing performance or emission standards promulgated under Section 112 of the Clean Air Act are incorporated by reference into the department's permitting program." 35 P.S. § 4006.6(a).

Section 6.6(b) of the APCA authorizes the Department to establish a performance or emission standard on a case-by-case basis for individual sources or a category of sources in the event that the EPA Administrator has not promulgated a standard to control the emissions of HAPs pursuant to Section 112(c) of the Clean Air Act. Subsection (b) of the APCA provides that the Department shall incorporate the standard to control the emissions of HAPs into the plan approval or operating permit of any source within the category or subcategory. These standards must be equivalent to emission standards or limitations that would apply to the source if such standards were promulgated by the EPA Administrator pursuant to Section 112 of the Clean Air Act. 35 P.S. § 4006.6(b).

Section 6.6(e) of the APCA authorizes the Department to include, in plan approvals and operating permits, reasonable monitoring, recordkeeping and reporting requirements for HAP-emitting sources. 35 P.S. §4006.6(e). The provisions in Section 6.6 provide the statutory basis for developing and implementing case-by-case MACT determinations through the Department's plan approval program (preconstruction review).

Regulatory Authority

Section 127.35 of the Pennsylvania Code, establishes the process that the Department will follow in establishing MACT standards in plan approvals. 25 Pa. Code § 127.35(a). If the administrator of the EPA does not promulgate a standard to control the emissions of HAPs for a category or subcategory of major stationary sources under Section 112 of the Clean Air Act according to the schedule in Section 112(c) of the CAA, the Department will establish a performance or emission standard on a case-by case basis for individual sources or a category of sources for those major stationary sources. 25 Pa. Code § 127.35(c).

Pursuant to 25 Pa. Code § 127.35(d), the Department will establish performance or emission standards as required by Section 112(g) of the Clean Air Act. The case-by-case MACT standards will be incorporated into the plan approval of each source within the category or subcategory for which MACT has been established. Section 127.35(e) also authorizes the Department to require reasonable monitoring, recordkeeping and reporting requirements for sources which emit HAPs. 25 Pa. Code § 127.35(e).

Subsection (f) provides that any person challenging a performance or emissions standard established by the Department must demonstrate that the standard does not meet the requirements of Section 112 of the Clean Air Act. 25 Pa. Code § 127.35 (f).

The provisions in Section 6.6 of the APCA and 25 Pa. Code § 127.35 provide the basic framework for the administration and enforcement of the requirements of Section 112(g)(2)(B) of the Clean Air Act. Consequently, the PADEP is authorized to make case-by-case MACT determinations for constructed and reconstructed major sources which meet the applicable requirements of 40 CFR §§ 63.40 through 63.44.

State Implementation Plan

Pennsylvania's plan approval and operating permit programs have been part of the Pennsylvania State Implementation Plan (SIP) since 1972. As a result of the amendments to Pennsylvania's Air Pollution Control Act and the amendments to the State Plan Approval and Operating Permit Program, published as final rulemaking on November 26, 1994, PADEP submitted the Commonwealth of Pennsylvania's revised plan approval and operating permit programs to EPA as a SIP revision on May 18, 1995. Subsequently, EPA granted full approval of the Commonwealth's Title V operating permits program on August 30, 1996, and established a mechanism for delegation of the provisions of 40 CFR Part 63, Subpart A and Section 112 standards adopted by EPA. 61 FR 39597. As part of the final action on the Title V program, EPA also approved Pennsylvania's request to regulate HAPs through the issuance of federally enforceable State operating permits and plan approvals (pre-construction permits). The provisions in 25 Pa. Code Chapter 127, Subchapters B (relating to plan approvals) and F (relating to operating permit requirements) were also approved and codified in the SIP at 40 CFR § 52.2020(c)(110). Sections 52.2061 and 52.2062 describe the federal enforceability of PADEP operating permits and plan approval programs, respectively. 40 CFR §§ 52.2061 and 52.2062.

Applicability

The "Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources" apply to the owners or operators of a constructed or reconstructed major source of HAPs. For Section 112(g) purposes, a "major source" means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of a single HAP or 25 tons per year of any combination of HAPs.

The requirements for MACT determinations for a constructed or reconstructed major source, as described in 40 CFR § 63.43, apply to "greenfield" facilities or a new or a reconstructed "process or production unit" at an existing facility which emits or has the potential to emit HAPs at major source threshold levels. The case-by-case MACT determination requirements do not apply to research and development activities as defined in 40 CFR § 63.41. The Section 112(g) requirements also do not apply to stationary sources that are within a source category that has been deleted from the source category list pursuant to Section 112(c)(9) or electric utility steam generating units unless

and until those units are added to the source category list established under Section 112(c)(5) of the Clean Air Act.

Adoption of Section 112(g) Program

Pursuant to 40 CFR § 63.42(a), the Department has published a notice stating that the permitting agency has adopted a program to implement Section 112(g)(2)(B) requirements for the construction or reconstruction of major sources of HAPs. The notice of the adoption of the Section 112(g)(2)(B) program specifies that the program implementing the requirements for case-by case MACT determinations will be effective on June 29, 1998. Copies of the notices announcing the adoption and implementation of Pennsylvania's Section 112(g)(2)(B) program are attached hereto as Appendix A (relating to Section 112(g) newspaper and Pennsylvania Bulletin notices).

The Section 112(g)(2)(B) program submittal includes a certification, by PADEP's Director for the Bureau of Air Quality, that the Commonwealth's program for case-by-case MACT determinations satisfies all applicable requirements established under 40 CFR §§ 63.40 through 63.44 for MACT determinations for constructed and reconstructed major sources. The certification also specifies that June 29, 1998, is the effective date of the program. 40 CFR § 63.42(a).

Administrative Procedures

The purpose of Pennsylvania's plan approval and operating permit programs is to regulate air contamination sources for the public welfare. Air quality shall be maintained at existing levels in areas where the existing ambient air quality is better than the applicable ambient air quality standards, and air quality shall be improved to achieve the applicable ambient air quality standards in areas where the existing air quality is worse than the applicable ambient air quality standards. In accordance with this purpose, Pennsylvania's plan approval and operating permit programs are designed to insure that new sources conform to the applicable emission standards and that they do not result in producing ambient air contaminant concentrations in excess of all applicable ambient air quality standards. New sources shall control the emission of air pollutants to the maximum extent, consistent with the best available technology (BAT) as determined by the Department as of the date of issuance of the plan approval for the new source. Pennsylvania's federally enforceable plan approval and operating permit programs apply to both minor and major sources, including those defined in 40 CFR § 63.2. These plan approval and operating permit programs, approved by EPA under Sections 110 and 112 of the Clean Air Act, ensure that plan approvals and/or operating permits issued by the Department for major HAP-emitting facilities are federally enforceable. 61 FR 39597, July 30, 1996.

Requirements For Constructed And Reconstructed Sources

Pursuant to 40 CFR § 63.43(c)(2)(ii), the owner or operator of an affected source may apply for a MACT determination under any administrative procedures for preconstruction review established by the permitting authority. Whenever an owner or operator constructs or reconstructs a major source of HAPS in Pennsylvania that is subject to the requirements of Section 112(g)(2)(B), the owner or operator of the affected source must

obtain a case-by-case MACT determination approved by the Department during the plan approval process (preconstruction review). When necessary or appropriate for case-by-case MACT determinations, PADEP will also utilize the other administrative review procedures specified in 40 CFR § 63.43(c).

Application Requirements For Case-By-Case MACT Determinations

The prescriptive requirements for applications for a case-by-case MACT determination specified in 40 CFR § 63.43(e) are incorporated by reference into the Department's permitting program. These requirements have been incorporated as revisions to Pennsylvania's "Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Air Cleaning Device."

MACT Approval Notices and Public Comments

The notice provisions in 25 Pa. Code § 127.44 establish the criteria for public participation in plan approval decisions including case-by-case MACT determinations. In accordance with the requirements of 40 CFR § 63.43(g), the Department will incorporate the Notice of MACT Approval in the preconstruction review (plan approval) notice. A notice of action to be taken on each plan approval application will be published on at least 3 separate days in a prominent place and size in a newspaper(s) of general circulation in the county where the source is to be located. The notice will also be published in the Pennsylvania Bulletin and a 30-day comment period, from the date of publication, is provided for the submission of comments on the plan approval.

The Department will provide notice of final MACT approvals to EPA and affected states according to the notice requirements of 25 Pa. Code § 127.44 and 40 CFR § 63.43(i).

Section 112 (g) Program Effective Date

Program Adoption

The effective date for the implementation of Pennsylvania's Section 112(g)(2)(B) program for the determination of MACT standards on a case-by-case basis will be June 29, 1998.

Case-by-Case MACT Determinations

No person may begin actual construction or reconstruction of a major source in Pennsylvania until the Department determines that the MACT emissions limit will be met. The effective date of a Section 112(g) MACT determination will be the date of issuance of the plan approval incorporating the MACT determination. In the event that the owner or operator of an affected source requests a different review option for MACT determinations, the standards will be effective upon issuance of the notice of approval of the final MACT determination. 40 CFR § 63.43(j).