

October 16, 1995

MEMORANDUM

SUBJECT: Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V

FROM: Lydia N. Wegman, Deputy Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: See Addressees

In a guidance memorandum dated April 26, 1993, the Agency clarified its interpretation of the term "regulated air pollutant" as defined in the operating permit rule (see 40 CFR 70.2). Recently, many discussions have been held concerning the application of this definition to sources of particulate matter under the title V operating permit program. Today's memorandum provides additional guidance to assist permitting authorities in determining which sources of particulate matter are subject to the requirements of title V.

There are different forms of particulate matter for which controls are required by various regulations. The April 26, 1993 memorandum listed PM-10 and total suspended particulates as regulated forms of particulate matter and, consequently, regulated air pollutants. The EPA has recently reevaluated this finding and has concluded that its definition of regulated air pollutant under title V applies only to emissions of PM-10. A detailed discussion of the basis for this conclusion is attached.

Today's guidance should be used to determine which sources of particulate matter are subject to minimum title V requirements and fee calculations. The Federal minimum for applicability of title V to sources of particulate matter should be based on the amount of emissions of PM-10, not particulate matter, that the source has the potential to emit. Some sources [such as country grain elevators, aggregate (rock, gravel, and sand) handling operations, and some mining operations] may not be major

sources of PM-10 even though they would have been considered major sources of particulate matter.

This guidance does not change any requirements for sources to comply with emission limitations or work practice standards as described in State implementation plans (SIPs) and new source performance standards (NSPS). For example, the required procedures for determining compliance with NSPS continue to be based on in-stack measurements of particulate emissions or visible emissions observations (i.e., Test Methods 5, 9, 17, and 22, and Performance Specification 1). The Federal minimum is that if sources are major, then they must obtain title V operating permits which include all applicable requirements. Therefore, if a source is major for particulate matter, but not for PM-10, the Federal minimum would be that a title V operating permit would not be required if the only pollutant that would make the source major is particulate matter. Any requirements to comply with NSPS or SIPs would remain in effect, however.

This clarification of PM-10's status as the regulated pollutant will cause some difficulties in estimating emissions; however, tools are available for many source categories. For example, although some 1900 particulate matter emission factors can be found in the document referred to as "AP-42," there are also over 1200 PM-10 factors. In addition, category specific particle-size distributions are available for a number of other categories on EPA's data bases.

This revision of previous guidance constitutes a change only with regard to the title V operating permit program. It does not change any other interpretations or requirements that have been previously provided for implementing the Clean Air Act.

The policies set forth in this memorandum are intended solely as guidance and not final Agency action. This guidance cannot be relied upon to create any rights enforceable by any party. For further information on the title V aspects of this guidance, please contact Leo Stander at 919-541-2402, and for further information on emissions estimation techniques, please contact David Mobley at 919-541-4676.

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region I
Director, Air & Waste Management Division, Region II
Director, Air, Radiation & Toxics Division, Region III
Director, Air, Pesticide & Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA and TSCA Division, Region VII
Director, Office of Pollution Prevention, State and Tribal,
Region VIII
Director, Air & Toxics Division, Region IX
Director, Office of Air, Region X

cc: Chief, Air Branch, Regions I-X
Operating Permits Program Contact, Regions I-X
OAQPS Division Directors

REGULATED AIR POLLUTANT: PARTICULATE MATTER

This document explains the Environmental Protection Agency (EPA) policy that, at this time, PM-10 is considered to be the only regulated form of particulate matter. Today's policy supersedes prior EPA statements which indicated that a second regulated form of particulate matter existed. As explained further below, such prior statements were based on the fact that EPA had established specific compliance methods for sources of particulate matter under the new source performance standards (NSPS). The immediate consequence of this policy is that under the title V operating permits program only PM-10 is considered by EPA to be the regulated form of particulate matter for applicability and fee purposes. This policy does not affect (1) existing requirements under the NSPS that a source comply with applicable performance standards for particulate matter emissions or (2) provisions contained in State implementation plans for particulate matter, including existing particulate emissions limitations, which have been approved by EPA and are relied upon to attain or maintain the national ambient air quality standards (NAAQS) for particulate matter.

Background

The part 70 regulations for State title V operating permit programs define "regulated air pollutant" at 40 CFR 70.2. This definition is intended to ensure that permitting authorities receive appropriate information on all pollutants which are "regulated" under the Clean Air Act (Act) and emitted by a source. The term "regulated air pollutant" is intended to reflect all pollutants subject to a standard, regulation, or requirement by including in the definition five specific categories of pollutants which would be considered regulated air pollutants.¹ Questions have arisen, based on an EPA-issued memorandum on April 26, 1993, entitled "Definition of Regulated Air Pollutant for Purposes of Title V," concerning how many regulated forms of particulate matter the definition includes. The memorandum identified two regulated indicators--PM-10 and total suspended particulate (TSP). The PM-10 was considered regulated because it was a pollutant for which a NAAQS had been

The five categories of pollutants included (1) nitrogen oxides and volatile organic compounds, (2) any pollutant for which NAAQS have been established, (3) any pollutant that is subject to an NSPS under section 111, (4) certain ozone depleting substances, and (5) any pollutant subject to national emission standard for hazardous air pollutants (NESHAP) under section 112.

promulgated. The TSP was listed as a pollutant regulated under the NSPS.²

Implied in the April 1993 memorandum (though not explicitly stated therein) was the interpretation that the NSPS for particulate matter--which measures a different form of particulate than PM-10--automatically constituted a separate regulated indicator for particulate matter. The EPA has reevaluated this interpretation and has concluded that it is no longer appropriate. It is EPA's current position that different indicators for particulate matter may be used as surrogate measures where appropriate for controlling ambient concentrations of PM-10 without specifically requiring such surrogates themselves to be regarded as regulated pollutants. The EPA further believes that the basis for determining what the regulated pollutant or indicator is for particulate matter should focus on EPA's intent as evidenced primarily by the underlying statutory authority used by EPA to subject the relevant air pollutant to a standard, regulation or requirement, and by statements made by EPA in connection with its promulgation. This interpretation does not preclude EPA from specifically choosing to regulate a different indicator for particulate matter under the authority of section 111 of the Act. However, as explained below, it was not EPA's intent to do so for any of the NSPS promulgated to date for particulate matter.

Section 109 authority

To date, EPA's efforts to regulate particulate matter have relied primarily upon the joint authorities of sections 108 and 109 of the Act. Section 108 directs the Administrator to identify pollutants which may reasonably be anticipated to endanger public health or welfare and to issue air quality criteria for those pollutants. Section 109 of the Act then governs the establishment and revision of NAAQS for criteria pollutants. On April 30, 1971, EPA promulgated the original NAAQS for particulate matter. The NAAQS defined ambient concentrations of particulate matter measured as TSP (ambient compliance sampling achieved by "high volume" samplers which collect particulate matter up to a nominal size of 25 to 45 micrometers). On July 1, 1987, EPA revised the NAAQS for particulate matter, replacing the TSP indicator with the new PM-10 indicator.

The EPA subsequently acknowledged that the correct description of the indicator considered to be regulated under the NSPS was "particulate emissions" as measured by in-stack test methods, e.g., Federal Reference Method 5.

Section 111 authority

The control of particulate matter is also required by various NSPS under section 111 of the Act. Section 111 generally requires EPA to promulgate NSPS for any category of stationary sources that "...causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." The EPA promulgated numerous NSPS specifically to address the criteria pollutant, particulate matter, during the period of time when the NAAQS for particulate matter were measured as TSP. While EPA indicated that particulate matter was a criteria pollutant for which NAAQS had been promulgated, EPA compliance tests used to meet the specific NSPS for particulate matter did not use the same indicator as the indicator for the NAAQS for particulate matter. Instead, such compliance tests typically involved measures of particulate matter in the stack using emissions testing procedures (e.g., Method 5) that do not take into account particle size. Nevertheless, preamble discussions to certain of these NSPS show that EPA regarded the pollutant of concern to be the criteria pollutant for which NAAQS had been promulgated. See e.g., NSPS for Phosphate Rock Plants (9/21/79), Nonmetallic Mineral Processing Plants (8/1/85), and Calciners and Dryers in Mineral Industries (9/28/92).

With the promulgation of PM-10 NAAQS in 1987, EPA considered the issue of whether to revise the NSPS with respect to particulate matter. In a July 1, 1987 Federal Register notice, EPA acknowledged that the indicator for particulate matter used to measure compliance with the NSPS was different from both TSP and PM-10 (52 FR 24710). The EPA stated, therein, that the existing NSPS "that reflect the best demonstrated control technology for particulate matter have the effect of controlling PM-10." The EPA later decided that, at least until further studies could be accomplished, the existing NSPS for particulate matter would serve as adequate surrogates for limiting ambient amounts of PM-10, the intended "regulated air pollutant." The NSPS promulgated after 1987 have continued to base compliance on in-stack emissions test methods which measure particulate emissions. Based on this regulatory history, it is EPA's position that the use of particulate matter emissions as the measure of compliance under various NSPS for particulate matter does not, in itself, constitute a new regulated air pollutant, but is simply designed as a surrogate measure of particulate matter to establish effective performance standards which limit the emissions of the regulated indicator, PM-10.

While the EPA contends that the control of a pollutant under an NSPS does not automatically result in that pollutant being considered regulated if the intended pollutant is already being regulated under separate legal authority, the EPA does specifically rely upon the NSPS to regulate certain pollutants. A case in point is the NSPS for kraft pulp mills at 40 CFR 60 subpart BB, which includes limitations for emissions of total reduced sulfur compounds. This and other specific non-criteria pollutants are considered "regulated air pollutants" by virtue of the fact that EPA intended for them to be regulated by the NSPS, since they are not regulated elsewhere.

Other examples of surrogate measures

The EPA has used the measurement of particulate matter emissions for compliance purposes as the surrogate for controlling the pollutant intended to be regulated in the section 112 context as well. Examples of such situations are the NESHAP for arsenic and asbestos at 40 CFR 61.140 and 61.170, respectively. The EPA listed asbestos and arsenic as hazardous pollutants under section 112 of the Act. Subsequently, the EPA promulgated standards for several sources of asbestos and for inorganic arsenic emissions from primary copper smelters which require compliance with a particulate matter emissions limit using Method 5 and opacity monitoring (51 FR 27956, August 4, 1986 at 27981.) Nevertheless, the EPA considers arsenic and asbestos, as listed in accordance with section 112 of the Act, to be regulated pollutants in these instances.

Other implications

Nothing stated in this current policy is intended to negate, void or otherwise affect limits expressed as particulate matter emissions under any NSPS, or the enforceability of existing standards contained in State control strategies for PM-10 which may actually require compliance with other indicators for particulate matter. The EPA historically has allowed States to rely upon their original SIPs based on the control of particulate matter emissions to demonstrate attainment with the PM-10 NAAQS. The EPA continues to consider these plans to be adequate so as to remain in effect and be enforceable as long as they continue to be used to demonstrate attainment of the regulated indicator for particulate matter, PM-10.