UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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MEMORANDUM

SUBJECT: Potential to Emit (PTE) Guidance for Specific Source Categories

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TO: See Addressees

This memorandum provides guidance for addressing the minor source status under the Clean Air Act (Act) for lower-emitting sources in eight source categories.

Background Information

Many Act requirements apply only to major sources with a potential to emit air pollutants at levels greater than a given amount. The Environmental Protection Agency (EPA), in its current regulations, defines a source's potential to emit air pollutants as follows:

> "Potential to emit" is the maximum capacity of a stationary source to emit under its physical and operational design. Any physical or operational limitation on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the (EPA) Administrator."[1]

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[1]The EPA is currently reviewing the requirement in EPA's regulations that limitations must be federally enforceable in order for sources to take credit for those limits. Because this eview is not yet complete, and is the subject of an upcoming rulemaking, the EPA has leveloped interim policies on this issue. The following policy memorandums describe EPA's nterim policies: "Release of Interim Policy on Federal Enforceability of Limitations on otential to Emit" (January 22, 1996) and "Extension of January 25, 1995 Potential to Emit ransition Policy" (August 27, 1996). The EPA describes the ways a State or local limit hieves "federally enforceable" status in a 1995 policy memorandum, "Options for Limiting the otential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air t" (January 25, 1995).

Often, in describing the overall stationary source population regarding potential-to-emit issues, EPA groups sources into three general types:

(1) Major sources - those that actually emit major amounts of air pollutants, or have the potential to do so;

(2) "True minor"[2] (also called "natural minor") sources - those that do not have the physical or operational capacity to emit major amounts (even if the source owner and regulatory agency disregard any enforceable limitations); and

(3) "Synthetic minor" sources - those that have the physical and operational capability to emit major amounts, but are not considered major sources because the owner or operator has accepted an enforceable limitation.

Many sources have the "capacity" to emit major amounts of air pollutants, but actually emit amounts that are much lower than the major source threshold. For such sources, States and local permitting agencies provide opportunities to obtain limits on their potential to emit through construction permit programs, operating permits, general permits applicable to multiple sources, State implementation plans (SIP), and other mechanisms.

There are two overall approaches that States and local agencies can use to establish enforceable emission limits which ensure that a source's potential emissions are below the major source threshold. Using the first approach, case-by-case permitting, agencies create terms and conditions tailored to a given plant site. This approach is essential for complex sources warranting close scrutiny, such as sources that comprise many different sources and source types, and sources that limit their emissions to near-major amounts. Under the second approach, generally appropriate for less complex sources, States and local agencies create a standard set of terms and conditions for many similar sources at the same time. The terms air quality agencies use to describe this approach include "general permits," "prohibitory rules," "exclusionary rules," and "permits-by-rule." (From this point on, rather than to repeat each of these terms, this guidance will use the term "prohibitory rule" for the latter three terms.) For a general permit, the permitting agency establishes a standard set of terms and conditions, and then incorporates those terms and conditions into the general permit. Sources wishing to be subject to the general permit must provide a notification to the permitting agency, and must comply with the standard terms and conditions. From the source's perspective, the administrative procedure for receiving a general permit is typically much more streamlined than receiving a case-by-case permit. State "prohibitory rules" are similar to general permits, but States or local agencies put them in place with a regulation development process rather than a permitting process.

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[2]The Act requirements for criteria pollutant programs refer to nonmajor sources as "minor sources," while the air toxics program in section 112 refers to nonmajor sources as "area sources." For purposes of this discussion, the term "minor" means all nonmajor sources.

What Is The Purpose Of This Guidance Memorandum?

The EPA issues this guidance to assist States and local agencies in efficiently creating potential-to-emit limits for small sources, and to assist States and source owners in identifying sources that are minor sources without additional limits. Where States and local agencies need and use this guidance, small business owners will achieve greater certainty that EPA, States and local control agencies, and the public do not consider them major sources under the Act.

Trade groups for a number of industries, typically those representing small business owners, have informed the EPA that these owners have significant uncertainties and confusion over their major or minor source status. These groups have also indicated to EPA that they would prefer that EPA give explicit guidance showing with certainty how a source can be considered a natural minor or synthetic minor, rather than for source owners to be left with continuing uncertainty.

Today's guidance addresses eight specific industry categories. The guidance provides technical information useful in devising potential-to-emit limits for small sources in the included industries. A State may find this information particularly useful for creating generic potential-to-emit limits in prohibitory rules and general permits for numerous similar, small sources in an industry.

The EPA has developed this guidance as a pooled technical effort with the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO). The EPA hopes that this information-sharing exercise will help to reduce uncertainty and help to foster technical consistency among permitting agencies.

While this guidance summarizes the results of a significant amount of technical work, and should provide information readily usable by permitting agencies, EPA also recognizes that many States and local agencies have already addressed issues related to many categories discussed in this memorandum. Additionally, States and local agencies may possess State-specific emissions information for given source types. It is not EPA's intent to imply that the screening cutoff levels described in this guidance are the only limitations that would be appropriate for a given type of sources in a given State or local area. The EPA does not intend that these calculations should result in the only values that EPA would find acceptable. Also, EPA does not intend to imply that calculations previously approved by the EPA in prohibitory rules or general permits must be revisited to conform to this guidance.

In providing guidance that should help provide easy ways for sources to clarify that they are minor sources, the EPA is not intending to imply that minor sources are not important air quality sources. Readers should not interpret this guidance as making any judgment about the wisdom of emission control measures targeted at minor source categories.

What Types Of Source Categories Are Included In This Guidance?

In identifying source categories to be covered within this guidance, the EPA included those categories for which a single type of activity tends to dominate emissions, and for which most sources in the category actually emit at levels well below their potential, and well under the major source thresholds. For sources with numerous categories at the plant site and/or that emit amounts that are just below the major source threshold, EPA believes that there is generally no feasible way to ensure their minor source status without a case-by-case permitting process. In addition, categories covered by this guidance tend to be those for which the parameters that affect emissions are relatively easy for EPA to describe and characterize. With some exceptions, this guidance does not cover categories involving control equipment.

Which Specific Source Categories Are Included?

Eight source categories are included:

(1) gasoline service stations;

(2) gasoline bulk plants (bulk plants are small bulk gasoline distribution facilities that distribute less than 20,000 gallons per day, and that receive gasoline by truck rather than by rail or barge);

(3) boilers (specifically, the guidance addresses natural gas and oil combustion in industrial boilers having a capacity of 100 million BTU/hour or less);

(4) cotton gins;

(5) coating sources;

(6) printing, publishing and packaging operations;

(7) degreasers using volatile organic solvents;

(8) hot mix asphalt plants.

What Guidance Does EPA Provide For Those Categories?

In the attached tables, EPA provides guidance in the form of operational cutoffs. The tables contain cutoffs that States and local agencies can use as limits in general permits and prohibitory rules.[3]

How Did EPA Calculate The Cutoffs?

The EPA's calculations are discussed in a separate document attached to this guidance memorandum entitled "Technical Support Document for Lower-Emitting Source Guidance Memorandum Documentation of Emission Calculations." For some categories, calculations were easy to make because the amount of pollutant used equates to the amount of pollutant emitted. For others, EPA needed to make more difficult technical judgments to make the calculations. In about half the cases, EPA relied on AP-42 emission factors as part of the technical basis for calculating the cutoffs. It is important to note that the AP-42 factor was not the entire basis for the calculation, and that the calculations leave a margin, generally about 50 percent to account for uncertainty in the emissions estimate.[4]

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[3]For categories with annual limits, the cutoffs are listed as values not to be exceeded during any rolling 12-month period. The EPA is accepting, on an interim basis, the use of a 12-month period, rather than the shorter time periods recommended by EPA's June 1989 policy memorandum "Guidance on Limiting Potential to Emit in New Source Permitting," given that the guidelines provide for cutoffs at levels nominally 50 percent of the major source threshold. Please note that EPA will be revisiting issues in an upcoming rulemaking related to the averaging times of potential-to-emit limits, including those for prohibitory rules and general permits.

[4]The EPA reiterates its position that emission factors, such as those in EPA's AP-42 compilation, are based upon the average of the values from available testing, and are not generally recommended as the approach to characterizing emissions from any given source for purposes of applicability determinations. The EPA believes, however, for the purposes of this guidance, that in a number of cases emission factors provide the only available means from which a cutoff could be determined. Rather than eliminate any such source category from consideration under this memorandum, the EPA feels that a reasonable approach is to make use of the AP-42 emission factors, building in a margin of error to account for the uncertainty in the data. The EPA believes that this approach should ensure that there is a low probability that any potentially major-emitting source would escape review. For source categories addressed by the guidance, which tend to be dominated by low-emitting sources for which source-specific emission factor data are not likely to be generated, the EPA believes this to be a reasonable approach. However, to the extent that source-test data, or other information indicate that the emission factors, or other assumptions made in calculating the limits are not appropriate for a specific source within a category, the source and permitting authority should not apply to this guidance. The EPA has not changed its position that such emission factors are not an acceptable approach for large industrial facilities. Finally, the EPA recognizes that as the emission factors used as the basis for the guidance are updated, it will be necessary to review the calculations in light of the revised factors to determine whether the guidance should be amended.

Similarly, the EPA believes that for nearly all source categories, even those that are simple enough to be good candidates for this guidance, there will usually be emitting activities that will be co-located with the activity described in the cutoff. Generally, these sources are a very low percentage of the emissions from the entire facility. Some examples of co-located sources are cold cleaners at gas stations, consumer product usage such as cleaners and white-out, lawn mowers, and small portable generators. To account for any such sources, EPA calculated the cutoffs leaving a small margin for any such sources that may be present. (Note that EPA does not mean to imply that overall these types of co-located sources are not environmentally significant--just that they probably have little bearing on whether a source is major or minor.)

Will This Guidance Replace The EPA's January 25, 1995 Transition Policy? If So, When Does That Transition Policy Expire?

Many lower-emitting sources in categories addressed by today's guidance may be operating under EPA's transition policy, first announced in a policy memorandum of January 25, 1995. The purpose of this transition policy was to alleviate concerns that sources may face gaps in the ability to acquire federally enforceable PTE limits. For sources lacking federally-enforceable limitations with low actual emissions, the transition policy provided a 2-year period extending from January 1995 to January 1997 (for sources lacking federally-enforceable limitations). On August 27, 1996, the EPA extended the transition period until July 31, 1998. During this transition period, State and local air regulators have the option of treating lower-emitting sources as minor, if the source owner maintains adequate records to demonstrate that actual emissions are less than 50 percent of the major source threshold. Today's guidance, in addressing sources that are common and numerous, should cover most of the lower-emitting sources that States may address by creating general permits or prohibitory rules. The EPA believes, however, that States will need a reasonable amount of time to implement today's guidance.

The EPA will release a separate guidance memorandum in the future to address issues related to the expiration of the transition policy. The transition policy involves other issues, in addition to those for sources emitting less than 50 percent of the major source threshold, and the EPA prefers to address all of those issues at the same time.

How Does This Guidance Relate To State And Local Minor Source Construction Permit Programs?

This guidance is NOT intended to affect minor source new source review (NSR) programs. Those programs are necessary for attainment and maintenance of the national ambient air quality standards (NAAQS), and for generally managing and protecting air quality in a given location. These are considerations independent of whether a source is a "major" or "minor" source. In making any change to a minor NSR program, the State or local agency needs to address air quality impact considerations in addition to those discussed here. For example, an agency limit to ensure that a source is minor for sulfur dioxide (SO_2) may involve fuel sulfur

limits. Because those same fuel sulfur limits could possibly lead to short-term exceedances of the SO_2 standards, and the agency could not categorically exempt such a source from minor NSR without addressing those air quality impacts; it is important to note that the annual limits contained in the guidance, while ensuring that the source is not a "major source," may not ensure that the source meets all short-term NAAQS.

Does this Policy Create Any Rights or Obligations?

The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, are not binding on any party, and cannot be relied upon to create any rights enforceable by any party.

How Is This Guidance Being Distributed?

The Regional Offices should send this memorandum to State and local agencies within their jurisdiction. This memorandum and the accompanying technical support document are accessible from the Internet. The Internet location is the "Office of Air and Radiation (OAR) Policy Guidance" portion of EPA's "technology transfer network (TTNWeb)," bulletin board, that is, http://www.epa.gov/ttn/oarpg.

If There Is Something I Do Not Understand, Who Will Answer My Questions?

Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. If you are a source owner and have questions about this policy, you should direct questions concerning specific issues and source-specific cases to the appropriate State or local agency. The Regional Office staff with questions may contact Timothy Smith of the Integrated Implementation Group at (919) 541-4718, or Carol Holmes of the Office of Regulatory Enforcement at (202) 564-8709.

Attachments

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GUIDANCE FOR STATES AND LOCAL AGENCIES TO USE FOR GENERAL PERMITS AND PROHIBITORY RULES

Table 1. Guidance For Gasoline Service Stations

If your regulations require these types of controls . . .	. . . and the major source cutoff in tons per year is . . .	. . . then the EPA guideline for a prohibitory rule or general permit cutoff in gallons per month is:
Uncontrolled	100 tpy VOC	380,000
	50 tpy VOC	190,000
	25 tpy VOC	95,000
	10 tpy VOC	38,000
Stage I vapor recovery	100 tpy VOC	630,000
	50 tpy VOC	310,000
	25 tpy VOC	160,000
	10 tpy VOC	63,000
Stage I and Stage II vapor recovery	100 tpy VOC	2,900,000
	50 tpy VOC	1,500,000
	25 tpy VOC	740,000
	10 tpy VOC	290,000

Table 1 applies to facilities for which 90 percent or more of volatile organic compounds (VOC) emissions come from gasoline service station operations.

NOTES ON TABLE 1:

1. There are probably very few uncontrolled gas stations in areas where the cutoff is 10, 25, and 50 tons per year VOC because Stage I and Stage II vapor recovery is required by the Act. The EPA made the calculations for "uncontrolled" in these areas to address any small stations that may be exempted by State regulations.

2. The EPA calculated the cutoff at 50 percent of major source threshold. The calculations are discussed in the technical support document.

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's Office of Enforcement and Compliance Assurance (OECA) entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

4. Where the cutoffs are contingent on stage I and/or stage II vapor recovery, the EPA recommends that general permit and prohibitory rule limits include a cross-reference to the applicable stage I and stage II regulations.

Table 1A. Guidance For Gasoline Stations Not Requiring Notifications Under General Permits and Prohibitory Rules

If you own or operate a gasoline service station . . .	. . . and the type of vapor recovery required by SIP regulations is . . .	. . . and you are a State or local area whose major source cutoff for VOC in tons per year is:	...then no formal notification is required by a State or local agency's prohibitory rule or general permit, if the number of refueling positions is no more than:
	No controls	100	17
	No controls	50	9
	No controls	25	4
	No controls	10	2
	Stage I	100	29
	Stage I	50	14
	Stage I	25	7
	Stage I	10	3
	Stage I and Stage II	100	134
	Stage I and Stage II	50	67
	Stage I and Stage II	25	34
	Stage I and Stage II	10	13

NOTES ON TABLE 1A:

1. The EPA calculations (see attached technical support document) concluded that it is a reasonable likelihood that sources meeting the size cutoffs in table 1A would not exceed the suggested throughput limits in table 1. In addition, sources meeting this description already keep records on gasoline sales that agencies can use to confirm that the limits are not exceeded. The EPA, States and localities have readily available sources of information to identify existing gas stations. Based upon these considerations, the EPA considers sources meeting the size cutoffs in table 1A as a lower regulatory priority. Accordingly, the EPA suggests those gas stations meeting these size cutoffs may be exempted from notification requirements by State prohibitory rules and general permits. (If exempted, owners of these stations would not be required to submit a written notification accepting a throughput limit).

2. The number of "refueling positions" means the number of cars that could refuel at the same time. For example, a typical service station island with two dispensers has three nozzles on each side of both dispensers. Such a two-dispenser design has four "refueling positions" because a maximum of four vehicles could be refueling at any given time. If the island had three dispensers with three nozzles on each side of each dispenser, this would be six refueling positions because six vehicles could refuel at once.

3. The calculations for this table assume that the location where the gasoline refueling is a service station with only trivial emissions from other sources and does not contain other significant sources of emissions. Do not rely on this table unless gasoline loading and refueling emissions cause 90 percent or more of your VOC emissions.

Table 2. Guidance For Bulk Gasoline Plants

For bulk gasoline plants . . .	If the major source cutoff is . . .	. . . then the EPA guideline for a prohibitory rule or general permit cutoff is . . .
	[All areas]	the basic definition of a bulk plant. That is, a source owner agreeing to limit the amount of gasoline loaded to no more than 20,000 gallons per day is a minor source.

Table 2 applies to bulk distribution facilities for which 90 percent or more of VOC emissions come from bulk loading and unloading of gasoline.

NOTES ON TABLE 2:

1. This guideline is based upon calculations that presume that reasonably available control technology (RACT) controls are required in all ozone nonattainment areas (see attached technical support document).

2. The calculations assume that the RACT regulations follow the control technique guideline (CTG), under which vapor balance is required for outgoing trucks when the bulk plant has a throughput greater than 4000 gallons per day. For areas with 10, 25, and 50 tons per year VOC major source cutoffs, the above guideline is sensitive to this assumption. If vapor balance is not required for outgoing trucks when the bulk plant has a throughput greater than 4000 gallons per day, prohibitory rules and general permits should contain a different cutoff that takes this into account. In any case, general permit and prohibitory rule limits at the 20,000 gallon limit should include a cross-reference to the applicable RACT regulation where such regulations are in place.

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 3. Guidance For Printing, Publishing And Packaging Operations

For this type of printing, publishing and packaging operation . . .	. . . and for this major source cutoff . . .	. . . EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Sheetfed (nonheatset) offset lithography	100 tpy VOC	14,275 gallons of cleaning solvent and fountain solution additives
	50 tpy VOC	7125 gallons of cleaning solvent and fountain solution additives
	25 tpy VOC	3550 gallons of cleaning solvent and fountain solution additives
	10 tpy VOC	1425 gallons of cleaning solvent and fountain solution additives
	25 tpy total HAP	3333 gallons of all hazardous air pollutant (HAP) containing materials
	10 tpy single HAP	1333 gallons of material containing any one HAP
Nonheatset web offset lithography	100 tpy VOC	14,275 gallons of cleaning solvent and fountain solution additives
	50 tpy VOC	7125 gallons of cleaning solvent and fountain solution additives
	25 tpy VOC	3550 gallons of cleaning solvent and fountain solution additives
	10 tpy VOC	1425 gallons of cleaning solvent and fountain solution additives
	25 tpy total HAP	3333 gallons of all HAP containing materials
	10 tpy single HAP	1333 gallons of material containing any one HAP

For this type of printing, publishing and packaging operation . . .	. . . and for this major source cutoff . . .	. . . EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Heatset web offset lithography -- uncontrolled	100 tpy VOC	100,000 lbs of ink, cleaning solvent, and fountain solution additives
	50 tpy VOC	50,000 lbs of ink, cleaning solvent, and fountain solution additives
	25 tpy VOC	25,000 lbs of ink, cleaning solvent, and fountain solution additives
	10 tpy VOC	10,000 lbs of ink, cleaning solvent, and fountain solution additives
	25 tpy total HAP	3333 gallons of all HAP containing materials
	10 tpy single HAP	1333 gallons of materials containing any one HAP
Screen printers	100 tpy VOC	14,275 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	50 tpy VOC	7,125 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	25 tpy VOC	3,550 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	10 tpy VOC	1,425 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP

For this type of printing, publishing and packaging operation . . .	. . . and for this major source cutoff . . .	. . . EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Flexography and rotogravure -- water-based or UV-cured inks, coatings and adhesives	100 tpy VOC	400,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	50 tpy VOC	200,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	25 tpy VOC	100,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	10 tpy VOC	40,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP
Flexography and rotogravure -- solvent inks -- uncontrolled	100 tpy VOC	100,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	50 tpy VOC	50,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	25 tpy VOC	25,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	10 tpy VOC	10,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP

* Table 3 applies to facilities for which 90 percent or more of VOC and HAP emissions come from the listed type of printing, publishing, and packaging operation, and from the materials indicated in the right-hand column. In determining whether this screening approach can be used, be careful to ensure that VOC and HAP emissions from materials <u>not listed</u> in the right-hand column (or other VOC or HAP sources present at the facility) do not exceed 10 percent of the total facility emissions.

If any of the screening levels is exceeded or if there is a combination of printing technologies (e.g., lithography and flexography, or water-based and solvent-based flexography operations) used in the same facility, then a more detailed approach is needed (see note 2).

NOTES ON TABLE 3:

1. These guidelines represent a simplified screening approach. This means that these cutoffs represent conservative calculations that would ensure that printers accepting these screening cutoffs as limits would be considered minor sources if records are kept of material usage.

2. A more sophisticated system of prohibitory rule or general permit limit is possible for sources exceeding these levels, but for which emissions remain well below the major source threshold. For such sources, who are willing to keep records of not only material usage but also the content of those materials, prohibitory rules may establish a 50 percent emissions cap. The technical support document includes equations to use in establishing that sources would remain below the 50 percent limitation. Note that emission calculations under this approach would use the actual density of each material used, rather than the "default" densities assumed in the technical support document. This more detailed approach must be used where any of the screening levels are exceeded, or there is a combination of printing technologies (e.g., lithographic and flexographic or water-based and solvent-based flexographic) present in the same facility.

3. The EPA is working on software that could be used by printers to demonstrate that emissions are below the screening cutoffs, or below the 50 percent cap.

4. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and Section 112 Rules and General Permits."

5. Note that the cutoffs for non-heatset sheetfeed and web-offset lithography do not require tracking of ink usage. As noted in the attached technical support document, only a small portion of the VOC content in ink is emitted for this type of printing, publishing, and packaging operation. Consequently, the EPA expects that more than 90 percent of emissions will be covered even if ink usage was not tracked. (Note that the screening approach can only be used if the materials in the right-hand column constitute more than 90 percent of emissions). In addition, the screening levels in the right-hand column are calculated at 50 percent of the major source threshold, and therefore provide a sufficient "cushion" to account for ink emissions.

6. Coatings use in printing and packaging operations are subject to the above table 3 cutoffs, rather than those in table 4.

7. The following industry trade groups have offered to provide their members with further information on this table: Gary Jones, Graphic Arts Technical Foundation (412) 741-6860; Marcia Kinter, Screenprinting and Graphic Imaging Association International (703) 359-1313; Dr. Doreen Monteleone, Flexographic Technical Association (516) 737-6020; Kelley Clark, Newspaper Association of America (703) 902-1833; Ben Cooper, Printing Industries of America (703) 519-8115; Monica McCabe, National Association of Printers and Lithographers (201) 444-6804.

Table 4. Guidelines For Surface Coating

For surface coating, the "limiting case pollutant" is . . .	. . . and the EPA guideline for a simplified screening cutoff for prohibitory rules and general permits would limit usage of coatings to:
10 TPY single HAP	250 gallons of coatings per month or 3000 gallons of coatings per 12-month period [See note 4 for description of more detailed approach]

Table 4 applies to facilities for which 90 percent or more of HAP emissions come from surface coatings.

NOTES ON TABLE 4:

1. These guidelines represent a simplified screening approach. This means that these cutoffs represent conservative calculations that would ensure that surface coaters accepting these screening cutoffs as limits would be considered minor sources, and would only need to keep records of material usage.

2. The guidelines are derived in part from an assumption that 6 pounds per gallon as the worst-case value for any individual HAP. These guidelines should not be relied upon if the State or local agency or source has data indicating that coatings used could exceed this level. The EPA recommends including 6 pound per gallon individual HAP limit in general permits and prohibitory rules.

3. "Coatings" means coatings plus diluents plus cleanup solvents.

4. A more sophisticated system of prohibitory rule or general permit limits is possible for sources exceeding these levels, but for which emissions remain well below the major source threshold. For such sources, who are willing to keep records of not only material usage but also the content of those materials, prohibitory rules may establish a 50 percent emissions cap.

5. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 4A. Guidance For Auto Body Shops Not Requiring Notifications Under General Permits And Prohibitory Rules

If you own this type of auto body shop . . .	**. . . then no formal notification is required by a State or local agency's prohibitory rule or general permit, if:**
Business entirely, or almost entirely, for collision repairs	. . . your shop has two or fewer bays devoted to painting.
Substantial portions of business devoted to repainting entire vehicles	. . . your shop has only one bay devoted to painting.
All auto body shops	.... your shop does not have the physical or operational capacity to do more than 50 jobs per week

NOTES ON TABLE 4A:

1. The values in this table are for facilities involved in automobile repair and are not appropriate for facilities capable of painting much larger surfaces, such as buses or earthmoving equipment.

2. The values in this table assume that nearly all of the VOC and HAP emissions from your shop come from coatings (including diluents and cleanup solvents). Do not rely on this table if more than 90 percent of your VOC and HAP emissions do not come from coatings, diluents and cleanup solvents.

3. The EPA calculations (see attached technical support document) concluded that facilities meeting the above descriptions would have a reasonable likelihood of complying with the limits contained in table 4. Accordingly, the EPA suggests that these sources are a relatively low regulatory priority, and that sources meeting these guidelines may be exempted from notification requirements in State prohibitory rules or general permits.

4. Facilities should not rely on these values in cases where the shop is capable of handling substantially more jobs per week than a typical facility. Caution should be given especially in using these values for facilities that routinely perform more than 50 jobs per week.

Table 5. Guidelines For Degreasing Operations

For degreasing operations . . .	. . . for the following major source cutoff . . .	. . . the EPA guideline for a simplified screening cutoff for prohibitory rules and general permits would limit usage of degreasing solvent (from the entire plant) in any 12-month rolling period to . . .
	10 TPY single HAP	2200 gallons of any one solvent-containing material (if no halogenated solvents) 1200 gallons (if contains perchloroethylene, 1,1,1-TCA, methylene chloride, or TCE) AND
	25 TPY total HAPs	5400 gallons of any combination of solvent-containing materials (if no halogenated solvents) 2900 gallons (if halogenated included)

Table 5 (except as noted in note 2 below) applies to facilities for which 90 percent or more of VOC and HAP emissions come from degreasing.

NOTES FOR TABLE 5:

1. These values were calculated originally by California agencies for the California model prohibitory rule (see attached technical support document).

2. These cutoffs provide a simplified method for sources for which degreasing constitutes nearly all of the emissions from a given site. A more sophisticated approach to prohibitory rules or general permits is possible for sites having significant contributions from both coating and degreasing sources. Such an approach would involve a 50 percent "cap" on emissions with documentation of material content and usage. An example approach for documenting that emissions are under such a

"cap" is contained in an EPA policy memorandum of October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," issued by D. Kent Berry, Acting Director, Air Quality Management Division.

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 6. Guidance For Cotton Gins

For cotton gins with the following configuration . . .	... if the major cutoff for PM-10 is . . .	. . . then the EPA prohibitory rule and general permit guideline for throughput, in bales of cotton ginned over a cotton ginning season, is . . .
Cyclones on all exhaust points	100 tpy PM-10	90,000 bales
	70 tpy PM-10	63,000 bales
Screened drums or cages on battery condenser and lint cleaner, cyclones on all other exhausts	100 tpy PM-10	72,000 bales
	70 tpy PM-10	50,000 bales

Table 6 applies to facilities for which 90 percent or more of particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-10) emissions come from cotton ginning operations.

NOTES FOR TABLE 6:

1. For a more detailed description of the two configurations listed above, please refer to EPA's AP-42 document, section 9.7.

2. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

3. The EPA calculated the 72,000 and 90,000 ton cutoffs based upon the upper end of the range from available tests. EPA believes these numbers are very conservative (worse than the typical "worst-case") and should ensure that there is a very low probability that a cotton gin limited to these levels would have a potential to emit major amounts. To reduce this probability even further, State and local agency prohibitory rules should ensure that the cutoff is not relied upon by the source in cases where: (1) the source owner, or a State or local agency has data for an individual source indicating major emissions at the cutoff; or (2) there are unique circumstances that would lead to greater emissions than for a typical plant design.

Table 7. Guidance For Oil And Natural Gas-Fired Boilers With Capacity That Is No More Than 100 million BTUs per hour

For boilers capable of burning . . .	. . . if the major source cutoffs are . . .	... then EPA's guidelines for prohibitory rule and general permit cutoffs are the following 12-month rolling limits:
NATURAL GAS ONLY	100 tpy NO_X 100 tpy SO2	710 million cubic feet
	50 tpy NO_X 100 tpy SO2	360 million cubic feet
	25 tpy NO_X 100 tpy SO2	180 million cubic feet
	10 tpy NO_X 100 tpy SO2	71 million cubic feet
DISTILLATE OIL ONLY	100 tpy NO_X 100 tpy SO2	*700,000 gallons*
	50 tpy NO_X 100 tpy SO2	*700,000 gallons*
	25 tpy NO_X 100 tpy SO2	*700,000 gallons*
	10 tpy NO_X 100 tpy SO2	500,000 gallons
RESIDUAL OIL ONLY	100 tpy NO_X 100 tpy SO2	*160,000 gallons*
	50 tpy NO_X 100 tpy SO2	*160,000 gallons*
	25 tpy NO_X 100 tpy SO2	*160,000 gallons*
	10 tpy NO_X 100 tpy SO2	*160,000 gallons*

For boilers capable of burning . . .	. . . if the major source cutoffs are . . .	... then EPA's guidelines for prohibitory rule and general permit cutoffs are the following 12-month rolling limits:
NATURAL GAS AND DISTILLATE OIL ONLY	100 tpy NO_X 100 tpy SO2	630 million cubic feet AND 600,000 gallons distillate
	50 tpy NO_X 100 tpy SO2	320 million cubic feet and 260,000 gallons distillate
	25 tpy NO_X 100 tpy SO2	160 million cubic feet and 130,000 gallons distillate
	10 tpy NO_X 100 tpy SO2	65 million cubic feet and 52,000 gallons distillate
NATURAL GAS AND RESIDUAL OIL ONLY	100 tpy NO_X 100 tpy SO2	650 million cubic feet and *160,000 gallons residual*
	50 tpy NO_X 100 tpy SO2	300 million cubic feet and *160,000 gallons residual*
	25 tpy NO_X 100 tpy SO2	150 million cubic feet and *160,000 gallons residual*
	10 tpy NO_X 100 tpy SO2	51 million cubic feet and *51,000 gallons residual*
NATURAL GAS, RESIDUAL AND DISTILLATE	100 tpy NO_X 100 tpy SO2	650 million cubic feet and *160,000 gallons residual*
	50 tpy NO_X 100 tpy SO2	300 million cubic feet and *160,000 gallons residual*
	25 tpy NO_X 100 tpy SO2	150 million cubic feet and *160,000 gallons residual*
	10 tpy NO_X 100 tpy SO2	51 million cubic feet and *51,000 gallons residual*

Table 7 applies to facilities where 90 percent of air emissions come from oil and natural gas-fired boilers with a capacity less than 100 million BTUs per hour.

NOTES FOR TABLE 7:

1. For the combustion source categories listed above, please note that the tables cover limits for boilers only and the fuels listed only. These fuel use limits are not applicable to other types of combustion devices such as engines and gas turbines, and are not applicable to facilities combusting waste oil.

2. The values listed in ***italics*** may be adjusted by States to take into account State and local fuel sulfur regulations. As explained in further detail in the technical support document, EPA calculated these values based upon worst-case sulfur content. Typically allowed sulfur-in-fuel values are less than those used in these calculations.

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

4. The guidelines are for the combined fuel use for all boilers at a given facility.

Table 7A. Boilers Not Needing Legal Limits On The Amount Of Fuel Burned

If you own or operate a boiler or group of boilers, and are capable of burning the following . . .	**... and you are located in an area whose major source cutoff for NO_X is the following . . .**	**. . . then you are a minor source if the TOTAL COMBINED boiler capacity, in million BTUs per hour is no more than:**
Natural gas only	25, 50, or 100 tons per year	25
Natural gas only	10 tons per year	10
Distillate oil, or a combination of distillate fuel and natural gas	[All areas]	10
Residual oil, or a combination of residual oil	[All areas]	5

NOTES ON TABLE 7A:

The calculations for this table are based upon calculations of nitrogen oxides (NO_X) and SO_2 emissions. The calculations assume that most of the emissions of these pollutants from your plant come from boilers. Do not rely on this table unless boilers cause 90 percent or more of your NO_X and SO_2 emissions.

Table 8. Guidance For Hot Mix Asphalt Plants

For asphalt plants, the following pollutants are the "limiting case" and . .	**...the EPA guideline for general permits and prohibitory rules is the following annual limit:**
100 tpy CO 100 tpy SO2 100 tpy PM10 70 tpy PM10	250,000 tons hot mix asphalt produced per 12-month rolling period

Table 8 applies to facilities for which 90 percent or more of air emissions come from hot mix asphalt production, including associated fugitives.

NOTES FOR TABLE 8:

1. For asphalt plants, States must determine on a case-by-case basis whether the guidelines are appropriate for their situation because it is possible that particulates are the limiting pollutant for sources constructed before the 1973 applicability date for the new source performance standard (NSPS). The EPA could not, in developing this guidance, address the effect of each particulate SIP regulation for asphalt plants that may exist. Although EPA does not expect that there are many States or sources for which this is the case, these guidelines only cover sources subject to the NSPS unless the State has made a demonstration that the 250,000 ton cutoff assures minor source levels for pre-NSPS sources.

2. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

3. The EPA calculated the 250,000 ton cutoff based upon AP-42 factors. Because the AP-42 factors are the averages of available tests, EPA included a margin to address sources whose emissions are greater than the average. State and local agency prohibitory rules should ensure that the cutoff is not relied upon by the source in cases where: (1) the source owner, or a State or local agency has data for an individual source indicating major emissions at the cutoff; or (2) there are unique circumstances

Table 8 Continued

(for example, the presence of a large on-site generator) that would lead to greater emissions than for a typical plant design.

4. Do not interpret this table as having any implications for minor source permitting. For example, as noted in the technical support document, sources meeting the above limit have the possibility to cause short-term violations of the ambient air quality standards for SO_2.

major after the solvent cleaning machine was replaced, then title V permitting could not be deferred in accordance with EPA's May 16, 1995 memorandum, "Potential to Emit for MACT Standards -- Guidance on Timing Issues."

Please keep in mind that the position set forth in this memorandum is intended solely as guidance, does not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party. Should you have other questions concerning this position, please contact Ingrid Ward of my staff at (919) 541-0300.

cc:

Air Program Managers, Regions I - X
Title V contact, Regions I - X
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John Walke, OGC
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A.4.21-1

AUG 1 4 2000

MEMORANDUM

SUBJECT: Guidance on the Major Source Determination for Certain Hazardous Air Pollutants

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

ORIGINAL SIGNED BY HENRY C. THOMAS, JR.

TO: Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air Protection Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Director, Air and Radiation Program, Region VIII
Director, Air Division, Region IX
Director, Office of Air, Region X

The purpose of this memorandum is to provide guidance to clarify how to apply the major source threshold for hazardous air pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act Amendments of 1990 that are listed as compounds (e.g., antimony compounds), salts and esters (e.g., 2,4-D), and/or as "plurals" (e.g., xylenes).[1] Over the past several years a number of questions have been raised by Regions, program offices, and State and Local air pollution control agencies concerning the proper interpretation of the major source threshold for some HAPs such as xylene. Xylene is listed separately along with three xylene isomers on the HAP list which has led to uncertainty as to how to determine whether a source's emissions exceed the major source threshold. When issues have arisen where a facility emits or has the potential to emit more than one chemical or substance in an aggregate group of HAPs, it has not been clear for the purposes of applicability determinations whether the 10 tons per year threshold applies to each chemical or substance separately, or to the entire aggregate group of HAPs. This memorandum clarifies that the 10 tons per year threshold applies to the entire aggregate group of HAPs. We are also clarifying how we are defining several other aggregate groups of HAPs, such as dibenzofurans, for determining major source thresholds.

[1] Collectively referred to in this memorandum as aggregate groups of HAPs.

While we intend to proceed under the guidance set out in this memorandum, final action will only occur when it is applied in a specific case. At that time, and only in that context, judicial review of EPA's interpretation would be available.

ORGANIC HAP COMPOUNDS

As stated above, the major source threshold for the aggregate groups of HAPs in Table 1 is 10 tons per year of any combination of the HAPs included in the listing, considered in aggregate. In most cases, EPA measurement techniques are available to measure the individual compounds which comprise the organic aggregate HAPs. For example, Facility A (below) measured their HAPs using a volatile organic sampling train. While none of the individual HAP compounds exceed 10 tons per year, the aggregate polycyclic organic matter (POM) emission rate is 13 tons per year. Facility A would be considered a major source of HAPs because it emits or has the potential to emit more than 10 tons per year of HAP within a single aggregate group of HAPs.

Facility A

Benzo(a)pyrene emissions	6 tons per year
Chrysene emissions	3 tons per year
Fluoranthene emissions	4 tons per year
Total	13 tons per year of Polycyclic Organic Matter emissions

There have been issues regarding the determination of major source status for sources that emit POM and which separately listed HAPs are considered POM. EPA published guidance, entitled "Locating and Estimating Air Emissions From Sources of Polycyclic Organic Matter" in September 1999, that discusses what kinds of POM (they are, for the most part, products of incomplete combustion) can be measured and are likely to be emitted. The following compounds are the POM listed in the guidance:

Naphthalene	Benzo(ghi)perylene
Acenaphthene	Benz(a)anthracene
Acenaphthylene	Chrysene
Fluorene	Benzo(b)fluoranthene
Phenanthrene	Benzo(k)fluoranthene
Anthracene	Benzo(a)pyrene
Fluoranthene	Dibenzo(a,h)anthracene
Pyrene	Indeno(1,2,3-cd)pyrene

However, there are also other compounds, besides those listed above, in the section 112(b) HAP list that are considered POM. These other POM (including those listed directly below) meet the criteria listed in footnote 4 of section 112(b), concerning "organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°

C." Further, many of the additional POM, listed below, can be measured using Method 8270C.

2-Acetylaminofluorene
Carbaryl
Dibenzofuran
3,3'-Dimethylbenzidine
3,3-Dimethoxybenzidine
4-Aminobiphenyl
Benzidine
Biphenyl
Dibenzofurans
Chlorobenzilate
DDE
3,3-Dichlorobenzidine
Quinoline
4,4-Methylene bis(2 Chloroaniline)
Methylene Diphenyl Diisocyanate
4-Nitrobiphenyl
2,3,7,8-Tetrachlorodibenzo-p-dioxin

Both of the groups listed above are POM and all compounds meeting the definition in footnote 4 are to be considered in aggregate when determining major source applicability.

There has been some question whether this policy for aggregate HAPs should apply to cresols and xylenes. In addition to having these categories of HAPs listed in the HAP list of section 112(b), there are specific xylenes and cresols isomers also listed in section 112(b). Although the HAPs list contains specific xylene and cresol isomers, these isomers can be emitted as mixtures; thus, the need to aggregate cresols and xylenes. In any case, the isomer emissions are to be considered in aggregate when determining major source applicability.

There has also been some question regarding which glycol ethers should be considered in making a major source determination. Although Section 112(b)(1) of the Clean Air Act Amendments of 1990 contains a definition of glycol ethers (as a footnote at the end of the list), in January 1999, we proposed a new definition of glycol ethers (64 Federal Register 1780, January 12, 1999) for both Clean Air Act and Comprehensive Environmental, Response, Compensation, and Liability Act purposes on which we expect to take final action soon. In determining the major source status for glycol ether sources, we will use whatever legal definition is applicable at the time the determination is made.

Polychlorinated biphenyls (PCBs) are followed in the Section 112(b)(1) HAP list with "Aroclors." Aroclors is a trade name for PCBs manufactured by Monsanto for transformers and are a specific subgroup of PCBs. We believe there are not now significant emissions of "Aroclors" PCBs, so we have not included them in Table 1. However, were "Aroclors" PCBs emissions high enough to require a major source determination, under this guidance they should be considered in the aggregate.

Although their total emissions nationwide are very low, the HAPs 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dibenzofurans are included in the list of POM because they meet the criteria in footnote 4. Therefore, emissions of these compounds should be aggregated with other POM when determining aggregate emissions for POM.

INORGANIC HAP COMPOUNDS

In many cases, there are no EPA measurement techniques that quantify the individual inorganic HAP compounds (e.g., arsenic trioxide or arsenic sulfate) which comprise inorganic aggregate HAPs (e.g., arsenic compounds). The emission measurements techniques available typically do not quantify the mass of other atoms contained in the compound (e.g., the mass of oxygen, chlorine, or sulfur). Since measurement techniques for metal HAPs report only the metal atom, emission rates computed using these measurements would be for only the metal component of the HAP. Because of these measurement limitations, EPA's policy to determine major source status is based on the measured metal HAP emissions or the potential to emit these metal HAPs alone. Since some metal HAPs are heavy compared to the other atoms, the additional mass contributed by the other atoms in the compound should be small. However, if a facility emitting inorganic HAP determines that their potential to emit is 50 percent or greater than the major source threshold, then it should determine the most likely HAP compounds being emitted and re-estimate potential emissions based on the total weight of the compounds in the aggregate HAP.

Lead compounds are a unique issue because elemental Lead is not regulated by section 112 provisions (see section 112(b)(7)) and, thus, elemental Lead emissions can't be used in determining aggregated emissions for Lead compounds. The measurement techniques available will not identify what portion of the total Lead emissions is comprised of elemental Lead. However, based on our understanding of Lead chemistry, we assume that for most industrial processes, most of the Lead is emitted as Lead compounds; specifically, Lead Oxides, Lead Chlorides, Lead Sulfites, and Lead Sulfates. In other words, if a facility emits Lead compounds, uses a measurement technique which only counts the mass of Lead to estimate actual or potential Lead compound emissions, and based on that mass the source is major, then the source is a major source. As such, it is not necessary to estimate and partition out elemental Lead when determining major source status.

RADIONUCLIDES

There have been some questions about determining the major source threshold for sources of radionuclides. Section 112(a)(1) allows the Administrator to establish different criteria for determining what constitutes a major source of radionuclides since radionuclides emissions are not measured in units of tons. This, however, would not preclude a known radionuclide emitter that is collocated with other HAP-emitting activities at a plant site from being considered a major source due to the more common, weight-based threshold. The July 16, 1992, source category list notice did not include any sources of radionuclides because no source met the weight-based major source threshold, and the Agency had not defined different criteria. At the current time, there remain no listed major source categories of radionuclide emissions.

NATIONAL TOXICS INVENTORY

The Emissions, Monitoring, and Analysis Division of EPA's Office of Air Quality Planning and Standards is currently working closely with State and Local Air Pollution Control Agencies (S/Ls) to compile a National Toxics Inventory (NTI) to support analyses required by the Clean Air Act (CAA) that depend on a high-quality, comprehensive HAP emissions inventory. The various CAA HAP data needs cover major, area, and mobile sources and include estimates of emissions at the national, regional, and county levels. The NTI also includes facility-specific and process-specific emission data suitable for use as input to computerized atmospheric dispersion models. The NTI is thus designed to provide a model-ready emissions inventory of all anthropogenic sources of HAPs to facilitate comprehensive dispersion and exposure modeling.

There have been some concerns raised as to whether the guidance set out in this memorandum may conflict with the goals of the NTI. Although the NTI instructions ask for compounds to be reported separately, the instructions also allow S/Ls to report just the metal mass, if that's all that they can do, provided they clearly indicate what they are reporting. Since the ultimate test for major source status is intended to be based on total actual mass of the metal compounds, the NTI goal of reporting actual mass is consistent. If you have any questions regarding the NTI, please contact Ms. Anne Pope at (919) 541-5373 or pope.anne@epa.gov.

IMPLEMENTATION

Sources that are or were potentially subject to Part 63 National Emission Standard for Hazardous Air Pollutants (NESHAP), case-by-case MACT determinations under 40 CFR Part 63, Subpart B (section 112(g)), and/or the Title V Operating Permit provisions and that emit or have the potential to emit any of the HAPs discussed in this memorandum should ensure that their determination of major source status is consistent with this clarification.

In some cases, Title V operating permits have not been issued or do not contain terms and conditions for Part 63 NESHAPs for facilities emitting HAPs because the major source threshold for each of the HAPs listed in Table 1 below was not considered in aggregate. In cases where operating permits were not issued because the HAPs listed in Table 1 below were not considered in aggregate, the operating permit applications must be submitted to the permitting authority as soon as practicable, but no later than 12 months after determining that a source is subject to section 112 and/or Title V provisions. In other cases, Title V operating permits were issued without Part 63 NESHAP terms and conditions because the HAP emissions were not considered in the aggregate. All these cases should be addressed in the same way as a source that never received a Title V permit, but is subject to the part 70 provisions.

In conclusion, we are clarifying that in accordance with section 112(a) and (b), HAPs that are part of the aggregate groups of HAPs, either discussed above or in Table 1, should be aggregated within each such group for the purpose of determining major source status. If you have any questions or need additional information, please contact Tom Driscoll, of my staff, at (919) 541-5135.

Attachment

cc: Patricia Embrey, OGC
Charles Garlow, OECA
David Guinnup, OAQPS, ESD
Susan Wyatt, OAQPS, ESD
Al Vervaert, OAQPS, ESD
K.C. Husvedt, OAQPS, ESD

USEPA:OAQPS:ITPID:IIG:TDRISCOLL:DALEE:NCMU:MD-12:7-18-00
Filename: agghapsmemo.wpd
File Code: Reg 149F

Table 1 Hazardous Air Pollutants Which May Contain More than One Unique Substance and Are to Be Considered in the Aggregate for Purposes of Determining Major Source Status

Asbestos
Cresols/Cresylic Acid (isomers and mixture)
2,4-D, Salts and Esters
Dibenzofurans
4,6 Dinitro-o-cresol, and Salts
Lindane (all isomers)
Xylenes (isomers and mixture)
Antimony Compounds
Arsenic Compounds (inorganic including arsine)
Beryllium Compounds
Cadmium Compound
Chromium Compounds
Cobalt Compound
Coke Oven Emissions
Cyanide Compounds
Glycol Ethers
Lead Compounds
Manganese Compounds
Mercury Compound
Fine Mineral Fibers
Nickel Compounds
Polycyclic Organic Matter
Selenium Compounds
Polychlorinated Biphenyls (Aroclors)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

MEMORANDUM

DATE: January 14, 1993

SUBJ: Exempting Sources From the Title V Program

FROM: Linda M. Murphy, Director
Air, Pesticides and Toxics Management Division

TO: John Calcagni, Director (MD-15)
Air Quality Management Division, OAQPS

On September 18, 1992, you issued a memorandum entitled "Limitation of Potential to Emit with Respect to Title V Applicability Thresholds" to William Spratlin, Director of the Air and Toxics Division in Region VII. Region I has concerns with some of the concepts in that memorandum.

This is a very important issue. Nationwide, EPA estimates that over 34,000 major sources will need to obtain operating permits. This number will increase significantly if states are not offered a reasonable means of limiting an existing source's potential to emit. For example, any small surface coating source can easily exceed the major source threshold if enforceable limitations on operation, production or air pollution control equipment are not considered in calculating the potential to emit. Many of these sources have actual emissions well beneath the major source definition. In order to minimize the burdens of permitting countless small sources, EPA must work to formulate a reasonable solution to this issue. This will also assist small businesses, since many of the these sources fall into this category.

Your staff has communicated some concerns about the potential abuses of such exemptions. In the past, for example, some existing major sources have inappropriately utilized permit restrictions when expanding their plants to avoid the major new source review requirements. Region I also shares these concerns. One possibility for your consideration is to limit the exemption to only those sources which truly are not major (i.e., never actually emitted over the major source thresholds) for any pollutant. This type of applicability criteria is consistent with the RACT program and seems to eliminate much of the gaming which has occurred under the new source review program.

For years EPA has been struggling without the authority to enforce conditions in state operating permits. This has caused many problems in implementation and enforcement of the Clean Air

Act requirements. In June of 1989, EPA offered states one possible solution with regard to criteria pollutants (see attachment for detailed discussion). In addition, your September 18, 1992 memorandum includes other possible options to addresses this issue. The paragraphs in the attachment summarize the options presented in the September 18, 1992 memorandum and include Region I's perspective.

Region I prefers two options: the general permit and Part 70 permit options. EPA must expand on these options. Region I is requesting a response to clarify these options from your office. We feel that the September 18, 1992 memorandum does not clearly outline the procedures for implementing these processes. These two options will be the easiest for states to implement and will ensure resolution of this issue in a practical manner.

Region I requests that you address this issue within the next month. In early 1993 states will begin drafting their operating permit programs. Guidance in this area will enable states to properly address this issue in their operating permits programs. If you or your staff have any questions regarding these concepts, please direct them to Lynne Hamjian of my staff at (617) 565-3250. Thank you for your consideration in this matter.

Attachment

cc: Edward Lillis, OAQPS
Kirt Cox, OAQPS
Ray Vogel, OAQPS
Adan Schwartz, OGC
Elise Hoerath, OE

REGION I ISSUE PAPER ON OPTIONS FOR LIMITING POTENTIAL TO EMIT WITH RESPECT TO TITLE V APPLICABILITY THRESHOLDS

Operating Permits Programs Under the SIP

In June of 1989, EPA offered states one possible solution to the federal enforceability issue with regard to criteria pollutants. States could develop operating permits programs for sources subject to SIP limitations and submit those programs for EPA approval into the federally-approved SIP. Subsequently, operating permits issued pursuant to those approved regulations would be federally enforceable. Most states did not embrace this option due to the increased public participation requirements, the enhanced EPA oversight, and the additional resources required to implement a program to meet the requirements in the Federal Register. In addition, many states anticipated the operating permits program contained in the Clean Air Act Amendments of 1990. Most states hoped that the federal operating permit program under Title V would resolve all of the past problems with federal enforceability of conditions in state operating permits.

The September 18, 1992 memorandum offers this as an option for states to utilize in order to exempt sources from the Title V program requirements. The memorandum states that EPA does not have extensive experience with implementing this rule. Region I concurs with this. No states in Region I have submitted operating permits regulations which meet the requirements in the June, 1989 Federal Register notice for incorporation into the SIP. While this approach is viable for the few states which (in the past) submitted operating permit programs into their SIPs, it is not practical now for states to develop separate operating permit program requirements and submit them to EPA for approval into the SIP at the same time they are developing operating permit programs under 40 CFR Part 70. This will require additional resources. Furthermore, this option does not cover non-criteria pollutants. For example, this approach does not address limits for sources which emit hazardous air pollutants, NSPS and 111(d) pollutants (i.e., total reduced sulfur, etc.), CFC's, etc. Consequently, this only poses a partial solution to the problem. Region I does not favor this as an option, since states will need to couple this approach with other approaches to address all pollutants. Again, this will complicate the permitting process unnecessarily and be more resource intensive.

Hazardous Air Pollutants

The September 18, 1992 memorandum suggests that EPA may develop a process under section 112(l) of the Clean Air Act to impose federally enforceable limits on a source's potential to emit. The memorandum further questions the legality of this approach.

While this may be a viable option, it is a separate process which will be developed under section 112. Because this process will be independent from the SIP option outlined above, it will take more resources to develop and implement. In addition, since it is under a different program, the administrative process could turn out to be different as well. This will complicate the permitting process unnecessarily and be more resource intensive.

General Permits

The September 18, 1992 memorandum states that some sources may be issued a general permit under Part 70 operating permits program for the purpose of avoiding classification as a major source. This is an innovative approach which is worth expanding. One potential difficulty with this option is that the sources in the category may not have similar operations or processes and pollutants with similar characteristics. This will make it hard for states to develop one general permit which covers numerous sources. Experience in the Region shows that the conditions to limit a source's potential to emit can be very detailed. The state may have difficulty crafting federally enforceable conditions governing operation, emissions, monitoring, reporting, or recordkeeping which are substantially similar from source-to-source.[1] [See 57 FR 32250, 32278, col. 3.]

One advantage of this option is that it involves streamlined procedures for processing the permits. In addition, this option applies to all pollutants. Region I believes that states could effectively utilize general permits for exempting small sources (non-major) from the operating permits program. For example, a state could write a general permit to exempt a small boiler from being a major source which is subject to the full requirements of Title V by issuing a general permit limiting the fuel usage, hours of operation, etc. Region I requests further guidance from your office on the procedural process as well as the requirements for the type of enforceable conditions necessary to implement this option.

Operating Permits Under Title V

The last option discussed in the September 18, 1992 memorandum involves issuing a Title V permit to limit a source's potential to emit. Although this approach would involve additional effort for the source and permitting authority, Region I feels that this would still be used frequently. Although the source must submit

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[1] It is currently not clear to what extent these operating permit conditions will need to comply with EPA's guidelines on limiting potential to emit. EPA has issued extensive guidance documents and memoranda under the new source review program to address enforcement concerns.

a specific application and the state must issue a source-specific permit, it will allow the state to utilize the same procedural process to issue a permit restriction. Region I realizes that this means the state must follow the Title V public participation requirements as well as issue a permit with all of the components required under Title V (i.e., compliance certification, recordkeeping, periodic monitoring, etc.).

This option will be useful for existing major sources which seek limited exemptions from certain federal requirements. In addition, this option would be useful if the source applied for an exemption from the full Title V permit requirements by taking restrictions in its operating permit to stay below the major source definition (for all pollutants).[2] In this case the operating permit could simply contain conditions primarily to limit the source's potential to emit in an enforceable manner. In addition, states could streamline the permit application requirements for these sources to simplify the process. For example, if the source is not major, the application need only contain detailed information about the applicable limitations designed to restrict its potential to emit. The advantage of this process may be utilized for any type of source and any pollutant. Region I requests further guidance from your office on the procedural process as well as the requirements for the type of enforceable conditions necessary to implement this option.

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[2] Please note that not all sources will fit the criteria for general operating permits. Therefore, there may be a need to expand the operating permit program to allow the states to impose conditions which exempt the source from all of the Title V permit requirements.

A.7.1-6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

September 18, 1992

MEMORANDUM

SUBJECT: Limitation of Potential to Emit with Respect to Title V Applicability Thresholds

FROM: John Calcagni, Director /s/
Air Quality Management Division (MD-15)

TO: William A. Spratlin, Director
Air and Toxics Division, Region VII

This is to acknowledge receipt of your August 6, 1992 memorandum to John Seitz requesting guidance with respect to a State's ability to utilize a Title V permit, or other federally-enforceable means, to limit the potential to emit for various purposes.

Before addressing your specific questions, some background review will be helpful. We recognize that sources may wish to limit their potential to emit by accepting voluntary limits to avoid being subject to more stringent requirements. The voluntary limit must be federally enforceable. This is indicated in the definition of "potential to emit" contained in 40 CFR 70.2. There are several mechanisms that will allow sources to adopt federally-enforceable restrictions on their potential to emit. The preamble discussion on voluntary limits in the Part 70 rule for operating permits programs is a useful summary of these approaches (see 57 FR 32250, 32279, July 21, 1992).

A source that emits criteria pollutants may be subject to a federally-enforceable restriction on its potential to emit either under an existing State preconstruction review or a non-Title V State operating permits program that has been approved into a State implementation plan (SIP). These options were discussed in the preamble to the final rule: Requirements for the Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans, 54 FR 27274, June 28, 1989. Although we do not have extensive experience with implementing this rule, we believe the preamble and rule adequately describe the process States and sources would use to limit potential to emit. A source using this approach to take federally-enforceable conditions so as to not be "major" for Title V purposes would not have to obtain a Title V permit (assuming, of course, that the State Title V program does not

otherwise apply to the source). It, therefore, would not have to meet Title V permit requirements.

For sources emitting hazardous air pollutants listed in section 112(b), the Agency is also considering allowing States to use programs approved under section 112(l) as a means of developing federally-enforceable limits on the potential to emit, if such an approach is legally permissible. Implementation of this concept will require the resolution of many issues and will be addressed in forthcoming guidance issued pursuant to section 112.

It is also possible to limit a source's potential to emit through the Title V permitting process. Indeed, Wayne Leidwanger and Josh Tapp of your staff indicated that Nebraska wishes to use Title V permits to create various, federally-enforceable emissions limitations. This can be done in a number of ways.

Some sources may be issued a general permit under the Part 70 operating permits program for the purpose of avoiding classification as a major source. If a source above a certain emissions level is subject to more stringent requirements, in some situations a general permit may be developed to contain a principal requirement that would limit a source's potential to emit to below that level of emissions (see 57 FR at 32278). This approach can be used for either criteria or hazardous air pollutants. The primary advantage of a general permit is that it involves streamlined procedures for processing.

If a general permit is not used, a source could obtain the standard Title V permit. However, we believe this approach would involve additional effort for the source and for the permitting authority. Because the source would be subject to the full source-specified permit issuance process, it would be required to individually develop the periodic monitoring, reporting, and compliance certification aspects required of all Title V permitted sources. Although more burdensome for the source, the State may wish to take advantage of these procedural requirements to assure that the federally-enforceable conditions are being adhered to.

Because Title V permitting is likely to be more procedurally rigorous than the other approaches, Title V is probably not the preferred option for the State to use. In other words, we believe it would be more complicated for a State or source to use a Title V permit to avoid being considered a major source for Title V purposes. We believe the other options mentioned above (e.g., construction permits or operating permits programs that have been approved into a SIP) accomplish the goal in a more straightforward manner. We are, however, continually investigating approaches to developing federally-enforceable

limits on potential to emit, and we will inform you of any additional options.

Concerning the permit fee issue you raised, it is important to realize that States have considerable flexibility in determining which sources must pay permit fees as long as they maintain fee programs that result in the collection, in the aggregate, of sufficient funds to pay for all permit program costs. It is not necessary for all permitted sources to be charged a permit fee. Similarly, it is also not necessary for States to charge a permit fee based on potential to emit, but they may.

If you have any further questions, please contact Gwen Holfield of my staff at (919) 541-2343.

cc: J. Seitz
L. Wegman
B. Jordan
T. Williamson
M. Winer
Division Director, Regions I-VI and VIII-X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 8 1993

Mr. Charles Fryxell
President, California Air Pollution Control
Officers' Association
Mojave Desert Air Quality Management District
15428 Civic Drive, Suite 200
Victorville, California 92392

Dear Mr. Fryxell:

The purpose of this letter is to respond to the issues raised by the California Air Pollution Control Officers' Association (CAPCOA) and others concerning the requirements for implementing an operating permits program under the Clean Air Act. These issues were discussed in a September 22, 1993, meeting between EPA Deputy Administrator Robert Sussman and Congressmen Dooley, Thomas, Lehman and Condit and several of their constituents. The issues include: 1) fugitive emissions; 2) permit content and conflicting requirements; 3) limiting potential to emit; 4) permit fees; and 5) the meaning of equivalence under title V of the Clean Air Act.

Fugitive Emissions

CAPCOA has expressed its desire to avoid an approach that may draw farming operations into the permit program as a result of fugitive PM_{10} emissions. EPA has reached a decision on the treatment of fugitive emissions that is consistent with CAPCOA's recommendation. In brief, fugitive emissions of criteria pollutants need not be counted for applicability purposes for all sources in nonattainment areas. Rather, fugitive emissions of criteria pollutants must be counted in determining applicability only for those source categories set forth in paragraph 2 of the definition of "major source" in EPA's title V regulations at 40 CFR part 70.2. In addition, fugitive emissions of hazardous air pollutants must be counted for all sources in determining whether the source is major under section 112 of the Act.

Permit content and conflicting requirements

CAPCOA questions what applicable requirements a permit must contain when a source is subject to more than one standard for the same pollutant at the same emissions unit. CAPCOA proposes

that the most stringent applicable requirement be included in the permit and other requirements be referenced.

I have enclosed the answer to that question, developed by EPA's operating permits task force, which uses the CAPCOA approach under certain circumstances. In general, permits must contain all emission limits and compliance measures that are set forth in all applicable requirements. However, for cases in which different applicable requirements are expressed in the same form and units of measure, differing only, for example, in the number of the emissions limit, only the most stringent provision must be included in the permit.

Thus, in an example cited in your briefing document for Mary Nichols dated July 28, 1993, the emission limit contained in the new source performance standard (NSPS) could be dropped if and only if the limit resulting from the local agency's determination of best available control technology were expressed in the same units as the NSPS limit. If the NSPS limit were dropped, the permit would still need to reference the NSPS, as you suggest, in order to make the applicability determination clear. We believe this result is a fair compromise between the need to simplify and clarify permits and the need to avoid complex determinations of equivalency during EPA's 45-day review period. With respect to compliance provisions, the same policy applies. If the two compliance provisions differ only in the frequency of monitoring, for example, then the less stringent one may be dropped. In reaching this decision, the EPA is following the policy set forth in the section 112(l) proposed rulemaking, which is available in the May 19, 1993 Federal Register.

In addition to raising the issue of more stringent requirements, you also raise the issue of conflicting requirements. Conflicting requirements would be those that could not both or all be met by the source. For example, a limit expressed in mass of emissions per unit of heat input would not conflict with a limit expressed in rate of emissions. The EPA believes that conflicting requirements occur infrequently. If they do exist, they do so independently of the title V permit program. I suggest that truly conflicting requirements be addressed on a case-by-case basis.

Limiting potential to emit

CAPCOA has indicated that its primary concern with the title V program is the large number of sources that are required to obtain permits based on their potential emissions. Although many of these sources' actual emissions are below the major source

thresholds, they would be required to apply for title V permits because their potential emissions exceed the major source thresholds. CAPCOA has proposed that a prohibitory rule be adopted and approved into each air district's State implementation plan that would provide for the creation of federally-enforceable emission limits, thereby enabling sources to be excluded from the title V program.

We are developing two documents that I hope will provide useful new guidance on limiting potential to emit. The first document will address two new methods of limiting sources' potential to emit outside of the title V permit program. One of these is the extension to hazardous air pollutants (HAPs) of federally-enforceable emission limits created through State operating permit programs that are approved pursuant to the June 28, 1989 Federal Register. Previously, only criteria pollutant emissions were considered eligible for direct limitation through such permits.

The second approach is the one you propose, namely the use of rules to establish emission limits through standardized protocols. The rules would need to require sources to register and report in order to be enforceable, but the application of rules to individual sources would not need to be subject to EPA and public review. That review would, as you suggest, focus on the rules themselves. As you may know from your discussions with Region IX, the most difficult aspect of developing these rules is ensuring that the emission limits they create are enforceable as a practical matter. The document will cite the currently available guidance on enforceability, and look to future, more specific guidance as to how such rules can be made enforceable as a practical matter.

The second document will provide what I believe to be the key piece of specific guidance for California. Entitled "Criteria for a draft model rule for VOC and HAP sources," it will present EPA's current thinking as to what such a rule must contain, including specific recordkeeping and reporting requirements, in order for emissions to be limited through limits on quantities and/or VOC content of materials used. I anticipate that both of these documents will be available for distribution by the end of next week and we will send them to you immediately.

Permit fees

CAPCOA's issue, as expressed in your briefing document, is that a detailed fee demonstration is burdensome, especially for

small agencies, and your recommendation is that EPA provide more flexibility in demonstrating fee adequacy.

As you probably know, I recently reissued guidance on fee schedules (memorandum of August 4, 1993 entitled "Reissuance of Guidance on Agency Review of State Fee Schedules for Operating Permits Programs Under Title V," enclosed). That guidance is intended to clarify the requirement in section 502(b)(3) of the Act that each permitting authority collect fees sufficient to cover all reasonable direct and indirect costs required to develop and administer its title V permits program. The Act also sets forth the presumptive minimum fee, as well as the requirement that fee adequacy be demonstrated if a lesser amount than the presumptive minimum is to be collected.

The EPA recognizes that demonstrating the adequacy of a fee schedule places a burden on permitting authorities. EPA Region IX staff will be happy to assist California agencies in developing these fee demonstrations and my office will be available to help review draft demonstrations. I would also point out that there is considerable flexibility in how fees may be assessed. Finally, I would like to clarify the answer to a question raised at the September 22, 1993 meeting. Fees currently charged to sources that will be title V sources may be included in any demonstration of fee program adequacy, whether this is a detailed demonstration or a demonstration that addresses the presumptive minimum. This assumes that those fees remain in the fee schedule of the title V program and are used to support title V activities.

Equivalence of programs

As I understand it, the subject of overall equivalence of existing California programs with the requirements of title V was discussed at the September 22 meeting. I wish to make clear today the Agency's policy in this regard.

Permit programs must meet the minimum requirements of the Act, as set forth in the implementing regulations at 40 CFR part 70. While section 70.1(c) of these regulations states, "[t]he EPA will approve State program submittals to the extent that they are not inconsistent with the Act and these regulations," the preamble clarifies that "[t]he EPA has no leeway to accept current programs other than to judge them against the criteria for program content specified in section 502(b)." See 57 Federal Register 32265. Thus a weakness in one element compared with the part 70 minimum may not be offset by stringency in another element. For this reason, overall equivalence will not be

granted. Rather, each program, whether new or existing, will be reviewed for its adequacy with respect to 40 CFR part 70.

In conclusion, I am sure you know that interim approval is an option provided by the Act. Interim approval may be granted if a program "substantially meets" the minimum requirements but falls short in some areas. The EPA's policy on interim approval is set forth in my August 2, 1993 memorandum entitled "Interim Title V Program Approvals."

I trust that this letter is responsive to CAPCOA's concerns. My staff and I look forward to working with you during the coming months on approaches to limiting potential to emit. Please contact Kirt Cox of my staff at 919/541-5399 or Debbie Jordan of Region IX at 415/744-1253 should you have further questions.

Sincerely,

John S. Seitz
Director
Office of Air Quality Planning
and Standards

Enclosure

cc: James Boyd, California Air Resources Board
David Crow, San Joaquin Valley Unified AQMD
Abra Bennett, Monterey Bay Unified APCD
Stewart Wilson, CAPCOA
Ellen Linder, Bay Area AQMD
Honorable Calvin Dooley
Honorable William Thomas
Honorable Richard Lehman
Honorable Gary Condit
Michael Wang, Western States Petroleum Association

A.7.2-6

bcc: Robert Sussman
Lydia Wegman
Ed Lillis
Kirt Cox
Mike Trutna
Elise Hoerath, OE
Adan Schwartz, OGC

Question: If a source is subject to more than one standard for the same pollutant at the same emissions unit, do all of these standards have to be contained in the permit or may the permit contain only the most stringent standard?

Answer: Under Section 70.6(a)(1) all applicable requirements must be included in the Part 70 permit, and the permit must reference the origin of and authority for all terms and conditions of the permit. There are sources which are subject to several standards at the same emission unit for the same pollutant. For example, a source may be subject to a PSD permitted BACT limit, a NSPS standard and a SIP standard. Some have suggested that only the most stringent of these emission limits should go into the permit. However, each program under the Act has its own criteria and methodology for setting standards. Therefore, it may not always be easy to determine which standard is the most stringent because the standards may look very different. Determining which standard is most stringent may involve complex equivalency demonstrations. EPA cannot realistically review these types of determinations in the 45 days allowed for our review under section 505 of the Act and Section 70.8.

Therefore, EPA has decided to follow the position set forth in the proposed section 112(l) rulemaking. Permits will generally be required to contain all emission limits and compliance provisions (monitoring, testing, recordkeeping, and reporting) of all applicable requirements. However, if the different applicable requirements are expressed in the same form and units of measure (so that the only difference is, for example, the number of the emissions limit or the frequency of monitoring), then only the most stringent provision would need to go into the permit. This will facilitate EPA review in 45 days and help ensure that only standards which are less stringent are left out of permits. Both the emission limit and the compliance provisions of the standards must be in the same form and units of measure in order to delete one of the standards from the permit.

Section 70.6(a)(1)(i) requires permits to reference the origin of and authority for each term or condition of the permit. Where one permit term is going to be included in the permit to satisfy more than one applicable requirement, the permit should have legal citations to all the relevant applicable requirements as the origin and authority for the permit term. This is necessary in order to make the scope of the shield and the applicability determinations made in developing the permit clear.

A.7.3-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 15 1993

MEMORANDUM

SUBJECT: Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound (VOC) Use

FROM: for D. Kent Berry, Acting Director
Air Quality Management Division, OAQPS (MD-15)

TO: Air Division Director, Regions I-X

The 1990 Amendments to the Clean Air Act (Act), including the title V operating permits program, have made source status as a "major" stationary source of considerably greater relevance to air quality programs. The lower major source thresholds now included in the Act have made an unprecedented number of sources "major." Many of these sources are actually emitting air pollutants in amounts less than the major thresholds but are major on the basis of their potential to emit. Certain categories of these sources are comprised of sources that are in fact rather small and, in some cases, are not addressed in detail by State air quality programs. Examples include auto body shops, dry cleaners, printers, and surface coaters.

Many of these sources will seek federally-enforceable limits in their potential to emit so as to avoid the obligation to obtain a title V operating permit. The Environmental Protection Agency (EPA), State air agencies, and industry are all interested in creating these emissions limits in the most efficient manner consistent with having reasonable assurance that these are in fact enforceable and being complied with. There are a variety of approaches available for creating federally-enforceable emissions limits. While the creation of federally-enforceable emissions limits generally requires a source-specific evaluation created through an approved State permitting program, EPA recognizes that, for certain types of sources or emissions, the limits can be created through more streamlined processes that do not involve detailed review or public process for each individual source.

Probably the greatest need for such limits involves those sources, such as auto body shops and surface coaters, that would be major on the basis of use of raw materials containing VOC's. To aid States in developing generic enforceable emissions limits for such sources, we have developed technical guidance materials that States can use in creating such requirements. States seeking to use these approaches may submit appropriate regulations as State implementation plan revisions or, in the case of toxics, as section 112(l) plan provisions. The technical guidance materials, along with draft forms that States may use in implementing this process are attached to this memorandum. States may, of course, opt to develop their own approaches for creating such documents. The attached language and forms are provided as technical support to States and to provide an indication of what sorts of practices EPA considers approvable. Alternate approaches will be considered on their individual merits.

For further information about this guidance, please contact Kirt Cox at (919) 541-5399 or Eric Noble at (919) 541-5362. To discuss individual State regulatory provisions and issues, please contact your Regional Office title V permits program contact. Any questions on practical enforceability should be brought to the attention of Sally Mitoff at (703) 308-8692 or Clara Poffenburger at (703) 308-8709. The EPA is considering further options for use of these streamlined procedures with other pollutants and is interested in working with States in developing such approaches. Suggestions are invited and may by made by calling Mr. Cox or Mr. Noble.

Attachments

cc: Air Branch Chief, Regions I-X
Operating Permits Program Contact, Regions I-X
Regional Counsel, Regions I-X
Division Directors, OAQPS
A. Schwartz, OGC
E. Hoerath, OE

bcc: T. Helms, AQMD
K. Berry
E. Lillis
K. Cox
E. Noble
A. High

OAQPS:AQMD:PPB:OPPS:K.Cox/C.Bradsher(541-5399/MU)10/15/93.
File = A:\VOCRULE.3
Attachment 1 [EAN 2, b:VOCrule.8A, 10/18/93]

CRITERIA FOR A DRAFT MODEL RULE FOR VOLATILE ORGANIC COMPOUNDS (VOC'S) AND HAZARDOUS AIR POLLUTANT (HAP) SOURCES

PURPOSE: To provide a federally-enforceable mechanism by which certain sources emitting VOC's may certify that they are not major sources of those pollutants in a manner that can be recognized as federally enforceable. For the purpose of this guidance, "VOC" also encompasses HAP's as defined pursuant to section 112 of the Clean Air Act (Act) that are VOC's (including those that are not photochemically reactive).

APPLICABILITY: This approach is available to sources which opt to assume limitations on the quantities of materials used in their production processes which contain VOC's. It does not apply to VOC's that are produced as part of the manufacturing processes. That is, this approach applies limits on emissions resulting from the use of VOC-containing materials. To that end, all the VOC's and HAP's present in the source materials, such as paints and solvents, are assumed to be emitted to the atmosphere (VOC in equals VOC out). Because this rule relies on simple calculation procedures based on recordkeeping, sources seeking recognition of emissions limits based on the use of emissions control devices, which require more complex determinations, would not be able to take advantage of this approach. This approach would not be available to sources which are subject to title V requirements for other reasons (e.g., that have the potential to emit other pollutants in major amounts).

To be approvable, a State rule must require that the source owner or operator specifically apply for coverage. Such applications could take the form of a relatively simple certification of compliance with the applicability criteria and the requirements of the rule. An example of such a certification that EPA would find acceptable is attached as Attachment 2.

BASIS FOR THE CRITERIA: This approach applies to sources which agree to limit their annual emissions. The basis for determining compliance is the maintenance of records with respect to the use of VOC-containing materials and the periodic submittal of this information to the permitting authority. States may elect to streamline this process further by reducing the frequency and level of detail of this reporting for those sources accepting limits on emissions that are very substantially below the threshold for major source status. As described below, EPA suggests three different levels of reporting requirements for sources, depending on the degree of limitation that the source opts to take. Individual State rules developed pursuant to this approach should, of course, replace the threshold percentages

listed herein with actual quantities in tons per year appropriate to the areas subject to those rules. For example, the threshold for major source status for VOC's in ozone nonattainment areas designated as "serious" is 50 tons per year.

1. Sources which commit only to limiting their VOC emissions to less than the major source threshold.

These sources would be required to do more comprehensive recordkeeping and reporting than those smaller sources that accept more limited emissions caps. The EPA suggests that these requirements include:

a. Preparation of monthly consumption records of all materials used containing VOC's. Sources would make a separate record for each such material. These records would include the VOC and/or individual HAP content of each such material on the same form. Table 2 of Attachment 3 provides an example of such a form that States might find useful.

b. Summation of VOC and individual HAP emissions on a monthly or more frequent basis. Table 1 of Attachment 3 is offered as an example form. Such reports would be submitted to the State agency on a monthly basis.

c. Submittal of an annual inventory to the reviewing agency listing monthly VOC totals and total VOC emissions for the previous year.

d. Maintenance of purchase orders and invoices of VOC-containing materials which must be made available to the State agency upon request for use in confirming the general accuracy of the reports submitted pursuant to item b, above, regarding materials usage.

e. Retention of purchase orders and invoices for a period sufficient to support enforcement efforts.

f. Reporting of any exceedance of a requirement of this rule within 1 week of occurrence.

g. Certification of all submittals as to the truth completeness, and accuracy of all information recorded and reported.

2. Sources which commit to limiting their VOC emissions to 25 percent of the major source threshold.

These sources would also be required to meet all the above requirements, except that annual reports would need to be submitted annually, rather than monthly, for compliance with item b.

3. Truly small sources which commit to limiting their VOC emissions to 5 percent of the major source threshold.

These sources could dramatically limit their recordkeeping and reporting obligations. Such sources need only report total gallons of paints or solvents used on an annual basis. Table 3 of Attachment 3 could serve as a standard means for sources to maintain this tabulation and could be submitted to satisfy the annual reporting requirement of item c above. Such sources would be required to meet the same general obligations regarding purchase records and general compliance reporting obligations as sources in the other categories (items d-g).

ADDITIONAL CRITERIA:

- A source cannot rely on these emissions caps to justify violation of rate-based emissions limits or other applicable requirements of the Act.
- A State may require additional restrictions, e.g., limitations on monthly VOC use in the peak ozone formation season.
- The State must make a list of the sources which are subject to these requirements publicly available.
- All records shall be maintained at the site and available for inspection on demand.
- A violation of these requirements is a violation of the SIP or of the State's section 112 program, or both, depending on the particular EPA approval mechanism used. A violation also subjects the source to enforcement action for failure to meet requirements applicable to a major stationary source.

There are, of course, a variety of ways in which States may elect to implement this concept based on their particular air quality program needs and policy inclinations. The above is offered as one suggestion that states might find useful. States wishing to develop alternative approaches should contact their EPA Regional Office to discuss their approvability.

Attachment 2

OPERATING AGREEMENT FOR A SURFACE COATING OPERATION

Source Name: _____
Address: _____
Source Description: _____
_____
Emission Units: [e.g., Paint Spray Booths]
Number [e.g., 3]

Material Used Over Past 12 Months:

	Product				Actual Usage		
	Maker	Type	Number	#VOC/gal* (MSDS)	gal/day	gal/mo	gal/year
1)							
2)							
3)							
4)							
5)							
6)							

Maximum Annual Material Usage in Future:

	Product				Maximum Predicted Usage		
	Maker	Type	Number	#VOC/gal* (MSDS)	gal/day	gal/mo	gal/year
1)							
2)							
3)							
4)							
5)							
6)							

* Sources may require this input to be in #VOC/gallon solids (paint or solvent less water).

CERTIFICATION:

I certify that this source will not emit volatile organic compounds or volatile hazardous air pollutants (as defined pursuant to section 112 of the Clean Air Act) in excess of the amounts specified in [indicate which of the 3 size classes]. I further certify that all information submitted pursuant to this agreement is true, accurate, and complete.

Plant Owner/Operator _____ _____ _____

Name (print) Signature Date

Attachment 3

Table 1

MONTHLY EMISSIONS RECORD[1]

Plant Name _____

Address _____

Report for (month/ year)

Report Date (day/month/year)

	POTENTIAL EMISSIONS[2]					
	Volatile Organic Compound (VOC) Totals		Hazardous Air Pollutant (HAP) Totals			
			High Individual		All HAPS	
Months	1	Last 12	1	Last 12	1	Last 12
Units	pounds	tons	pounds	tons	pounds	tons
PAINT A	200	2.5	16	0.096	100	1.25
PAINT B						
PAINT C						
PAINT D						
SOLVENT 1						
SOLVENT 2						
SOLVENT 3						
SOLVENT 4	[from T X]					
TOTALS	650	4.2	900	5.4	2100	12.6

[1] Data in this table summarizes information from the table 1 worksheets for individual paints and solvents and other VOC and HAP sources at the listed stationary source.

[2] Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

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Attachment 3

Table 2

EMISSIONS WORKSHEET FOR MINOR VOC AND HAP SOURCES [3,4]

Plant Name _____
Address _____

Record for ____(month/year)____
Date Prepared __(day/month/year)__

Paint/Solvent Manufacturer _____
Paint/Solvent Name ____A____ Code No. _____

		A	B	C
	Paint/Solvent Constituents	Fraction in Paint/Solvent	Usage/Emissions Totals	
			Last Month	Last 12 Months
1	Paint/Solvent	---	500 lbs [gal x S.G.]	6.25 tons [sum of totals for last 12 months]
2	Total VOC	.40 [u]	200 lbs [A2 x B1]	2.5 tons [A2 x C1]
3	Total HAP	.20 [v]	100 lbs [A3 x B1]	1.25 [A3 x C1]
4	HAP A	w	[A4 x B1]	[A4 x C1]
5	HAP B	x	etc.	etc.
6	High Individual HAP		16 lbs	0.096 tons

[3] Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

[4] Separate worksheet (table 1) required for each paint or solvent used.

ED_002674_00004643-00060

Attachment 3

Table 3

EMISSIONS WORKSHEET FOR MINOR VOC AND HAP SOURCES [5,6]

Plant Name _____
Address _____

Record for ____(month/year)____
Date Prepared _(day/month/year)_

Paint/ Solvent	Usage Totals (gallons)												
	Month												12 Month Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Paint A													
Paint B													
Paint C													
Solvent A													
Solvent B													
Solvent C													
Solvent D													
Totals													

[1] Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

[6] Separate worksheet (table 1) required for each paint or solvent used.

ED_002674_00004643-00061

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

NOV 3 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable Emissions Limits

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The new operating permits program under title V of the Clean Air Act (Act), combined with the additional and lower thresholds for "major" sources also provided by the 1990 Amendments to the Act, has led to greatly increased interest by State and local air pollution control agencies, as well as sources, in obtaining federally-enforceable limits on source potential to emit air pollutants. Such limits entitle sources to be considered "minor" for the purposes of title V permitting and various other requirements of the Act. Numerous parties have identified this as a high priority concern potentially involving thousands of sources in each of the larger States.

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants (HAP's).

The purpose of this memorandum is to respond to these needs by announcing the availability of two further approaches to creating federally-enforceable emissions limits: the extension of existing criteria pollutant program mechanisms for HAP program

purposes, and the creation of certain classes of standardized emissions limits by rule. We believe that these options are responsive to emerging air program implementation issues and provide a reasonable balance between the need for administrative streamlining and the need for emissions limits that are technically sound and enforceable.

Background

Various regulatory options already exist for the creation of federally-enforceable limits on potential to emit. These were summarized in a September 18, 1992 memorandum from John Calcagni, Director, Air Quality Management Division. That memorandum identified the five regulatory mechanisms generally seen as available. These are: State major and minor new source review (NSR) permits [if the NSR program has been approved into the State implementation plan (SIP) and meets certain procedural requirements]; operating permits based on programs approved into the SIP pursuant to the criteria in the June 28, 1989 Federal Register (54 FR 27274); and title V permits (including general permits). Also available are SIP limits for individual sources and limits for HAP's created through a State program approved pursuant to section 112(l) of the Act.

Regional Office and State air program officials realize that these five options are generally workable, but feel that the programs emerging from the 1990 Amendments present certain further needs that are not well met. They note that NSR is not always available, title V permitting can be more rigorous than appropriate for those sources that are in fact quite small, and that general permits have limitations in their usefulness. The use of State operating permits approved into the SIP pursuant to the June 28, 1989 Federal Register is generally considered to be a promising option for some of these transactions; however, these programs do not regulate toxics directly.

State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities:

source-specific preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(l) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(l), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(l) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics pursuant to the criteria set forth in the June 28, 1989 Federal Register. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

This is a significant opportunity to limit directly the emissions of HAP's. It also offers the advantage of the administrative efficiencies that arise from using existing

administrative mechanisms, as opposed to creating additional ones.

States are encouraged to consult with EPA Regional Offices to discuss the details of adapting their current programs to carry out these additional functions. The EPA will consider State permitting programs meeting the criteria in the June 28, 1989 Federal Register as being approvable for HAP program functions as well. States may submit their programs for implementing this process with their part 70 program submittals, or at such other time as they choose. The EPA has various options for administratively recognizing these State program submittals. The EPA plans initially to review these State programs as SIP review actions, but with official recognition pursuant to authorities in both sections 110 and 112. Once rulemaking pursuant to section 112(l) of the Act is completed, EPA expects to use the process developed in that rule for approving State programs for HAP's. The section 112(l) process may be especially useful prior to EPA approval and implementation of the State title V programs. The reader may wish to refer to the process for certain section 112(l) approvals proposed on May 19, 1993 (58 FR 29296) (see section 63.91).

The General Provisions (40 CFR part 63) establish the applicability framework for the implementation of section 112. In the final rule, EPA will indicate that State operating permits programs which meet the procedural requirements of the June 28, 1989 Federal Register can be used to develop federally-enforceable emissions limits for HAP's, thereby limiting a source's potential to emit. In addition, after we gain implementation experience, EPA will be evaluating the usefulness of further rulemaking to define more specific criteria by which this process may be used in the implementation of programs under section 112 of the Act. Any such rulemaking could similarly be incorporated into the General Provisions in part 63.

State-Standardized Processes Created by Rule to Establish Source-Specific, Federally-Enforceable Emissions Limits

State air program officials have highlighted specific types of sources that are of particular administrative concern because of their nature and number. These include sources whose emissions are primarily volatile organic compounds (VOC) arising from use of solvents or coatings, such as automobile body shops. Another example is fuel-burning sources that have low actual emissions because of limited hours of operation, but with the potential to emit sulfur dioxide in amounts sufficient to cause them to be classified as major sources.

The EPA recognizes that emissions limitations for some processes can be created through standardized protocols. For example, limitations on potential to emit could be established

for certain VOC sources on the basis of limits on solvent use, backed up by recordkeeping and by periodic reporting. Similarly, limitations on sulfur dioxide emissions could be based on specified sulfur content of fuel and the source's obligation to limit usage to certain maximum amounts. Limits on hours of operation may be acceptable for certain others sources, such as standby boilers. In all cases, of course, the technical requirements would need to be supported by sufficient compliance procedures, especially monitoring and reporting, to be considered enforceable.

The EPA concludes that such protocols could be relied on to create federally-enforceable limitations on potential to emit if adopted through rulemaking and approved by EPA. Although such an approach is appropriate for only a limited number of source categories, these categories include large numbers of sources, such as dry cleaners, auto body shops, gas stations, printers, and surface coaters. If such standardized control protocols are sufficiently reliable and replicable, EPA and the public need not be involved in their application to individual sources, as long as the protocols themselves have been subject to notice and opportunity to comment and have been approved by EPA into the SIP.

To further illustrate this concept and to provide implementation support to the States, EPA has recently released guidance on one important way of using this process. This document, entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," was issued by D. Kent Berry, Acting Director, Air Quality Management Division, on October 15, 1993. It describes approvable processes by which States can create federally-enforceable emissions limits for VOC for large numbers of sources in a variety of source categories.

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate for a State to apply these limits to individual sources through a registration process rather than a permit. A source could simply submit a certification to the State committing to comply with the terms of an approved protocol. Violations of these certifications would constitute SIP violations, in the case of protocols approved into the SIP, and be subject to the same enforcement mechanisms as apply in the case of any other SIP violation. Such violations would, of course, also subject the source to enforcement for failure to comply with the requirements that apply to major sources, such as the requirement to obtain a title V permit or comply with various requirements of section 112 of the Act.

Some States have also indicated an interest in more expansive approaches to implementing this concept, such as making

presumptive determinations of control equipment efficiency with respect to particular types of sources and pollutants. While such approaches are more complicated and present greater numbers of concerns in the EPA review process, they offer real potential if properly crafted. The EPA will evaluate State proposals and approve them if they are technically sound and enforceable as a practical matter.

States may elect to use this approach to create federally-enforceable emissions limits for sources of HAP's as well. Based on the same authorities in section 112 of the Act, as cited above in the case of operating permits, EPA can officially recognize such State program submittals. As with the operating permits option discussed in the preceding section, EPA plans initially to review these activities as SIP revisions, but with approval pursuant to both sections 110 and 112 of the Act, and approve them through the section 112(l) process when that rule is final.

Implementation Guidance

As indicated above, the creation of federally-enforceable limits on a source's potential to emit involves the identification of the procedural mechanisms for these efforts, including the statutory basis for their approval by EPA, and the technical criteria necessary for their implementation. Today's guidance primarily addresses the procedural mechanisms available and the statutory basis for EPA approval.

The EPA will be providing further information with respect to the implementation of these concepts. As described above, the first portion of this guidance, addressing limits on VOC emissions, was issued on October 15, 1993. My office is currently working with Regional Offices and certain States in order to assist in the development of program options under consideration by those States. We will provide technical and regulatory support to other State programs and will make the results of these efforts publicly available through the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network bulletin board.

We will provide further support through the release of a document entitled "Enforceability Requirements for Limiting Potential to Emit Through SIP Rules and General Permits," which is currently undergoing final review within EPA. In addition, EPA will be highlighting options for use of existing technical guidance with respect to creating sound and enforceable emissions limits. An important example of such guidance is the EPA "Blue Book," which has been in use by States for the past 5 years as part of their VOC control programs.

States are encouraged to discuss program needs with their EPA Regional Offices. The OAQPS will work with them in addressing approvals. As indicated, additional technical guidance for implementing these approaches is underway and will be made publicly available soon. For further information, please call Kirt Cox at (919) 541-5399.

cc: Air Branch Chief, Regions I-X
Regional Counsel, Regions I-X
OAQPS Division Directors
A. Eckert
M. Winer
A. Schwartz
E. Hoerath

A.7.5-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

NOV 2 1994

Mr. Jason Grumet
Executive Director, Northeast States
for Coordinated Air Use Management
129 Portland Street
Boston, Massachusetts 02114

Dear Mr. Grumet:

This is in response to Mr. Michael Bradley's March 22, 1994 letter to Mary Nichols seeking clarification of the Federal enforceability of State's existing minor new source review (NSR) programs. It is my understanding that some of the NESCAUM States are interested in using their existing minor NSR programs to limit a source's potential to emit so as to allow sources to legally avoid being considered a major source for title V purposes.

In my November 3, 1993 memorandum entitled "Approaches to Creating Federally-Enforceable Emission Limits," I described approaches that States could use to limit a source's potential to emit for title V purposes. While a number of approaches are acceptable, the Environmental Protection Agency (EPA) has promoted the use of State operating permits programs approved under sections 110 and 112(l), pursuant to the criteria set forth in the June 28, 1989 Federal Register. Among other things, these criteria include an opportunity for public and EPA review and require that permit conditions be practically enforceable. Several States have followed EPA's recommendation and have either adopted these requirements or are in the process of doing so.

The Agency recognizes the use of other approaches as well. In response to your question, EPA's position is that minor NSR permits issued under programs that have already been approved into the State implementation plan (SIP) are federally enforceable. Thus, EPA allows the use of federally-enforceable minor NSR permits to limit a source's potential to emit provided that the scope of a State's program allows for this and that the minor NSR permits are in fact enforceable as a practical matter.

Because minor NSR programs are essentially preconstruction review programs for new sources and modifications to existing sources, minor NSR programs can generally be used to limit a

source's potential emissions when such limits are taken in conjunction with a preconstruction permit action. In addition, please note that the term "modification" generally encompasses both physical changes and changes in the method of operation at an existing source (see Clean Air Act section 111(a)(4)). Thus, the scope of some, though not all, minor NSR programs is broad enough to be used to also limit a source's potential to emit for nonconstruction-related events. This occurs where the modification component of State programs extends to both physical changes and changes in the method of operation. In these cases, where a voluntary reduction in the method of operation (e.g., limit in hours of operation or production rate) by itself is considered a modification for minor NSR permitting, a source may reduce its hours of operation or production rate and make such a change federally enforceable through limits in its minor NSR permit.

Some States' minor NSR programs are written so as to preclude a source from limiting its potential to emit absent an increase in emissions. There may be other limitations on the scope of these programs as well. Since there is considerable variation among State minor NSR programs, a review of any individual State program would be necessary to determine its ability to limit a source's potential to emit. It may be beneficial for States to contact the appropriate EPA Regional Office if there are questions about the scope of the SIP-approved minor NSR program.

Minor NSR programs have generally been used in the past to limit a source's potential to emit for criteria pollutants. There is a growing need for sources to limit their potential to emit for toxic pollutants as well. The EPA is currently considering ways in which a State may limit the potential to emit of toxic pollutants, including possible uses of existing minor NSR programs. I plan to keep you and others aware of our efforts in this regard.

You should also be aware that a recent court ruling has called into question the Federal enforceability of a State minor NSR permit that does not meet the public participation requirements of current EPA regulations despite SIP approval of the State's program [see United States v. Marine Shale Processors, No. 90-1240 (E.D. La.) (bench ruling), June 15, 1994]. In that case involving extensive alleged violations of the permit terms, the court held that EPA could not enforce the terms of the minor NSR permit. The court subsequently ruled that the company could not rely on the permit to limit its potential to emit, and thus was liable for having failed to obtain a major

NSR permit. The outcome of this case suggests that States should proceed cautiously in relying on minor NSR programs to limit potential to emit where the program does not actually provide public participation.

In summary, EPA has provided guidance on approaches that are available to limit a source's potential to emit. The Agency recommends approaches that meet the criteria set forth in the June 28, 1989 Federal Register. Many States are taking action to adopt such programs. With respect to minor NSR permits, EPA believes that permits conditions issued in accordance with existing State minor NSR programs that have been approved into the SIP, and which are enforceable as a practical matter, are federally enforceable and can be used to limit potential to emit. Caution is advised, however, with respect to permits that do not meet procedural requirements. These programs are primarily preconstruction review programs although in many cases they can also limit a source's potential to emit in conjunction with operational changes.

As you have noted, title V issues are complicated and resource intensive. In order for the title V program to be successfully implemented, it is important that States and EPA work cooperatively in developing operating permits programs. Your comments and recommendations on program development issues are welcome.

We appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Air Division Director, Regions I-X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

A.7.6-1

JAN 25 1995

MEMORANDUM

SUBJECT: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Many stationary source requirements of the Act apply only to "major" sources. Major sources are those sources whose emissions of air pollutants exceed threshold emissions levels specified in the Act. For instance, section 112 requirements such as MACT and section 112(g) and title V operating permit requirements largely apply only to sources with emissions that exceed specified levels and are thus major. To determine whether a source is major, the Act focuses not only on a source's actual emissions, but also on its potential emissions. Thus, a source that has maintained actual emissions at levels below the major source threshold could still be subject to major source requirements if it has the potential to emit major amounts of air pollutants. However, in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-enforceable permit conditions which limit emissions to levels below the applicable major source threshold. Federally-enforceable permit conditions, if violated, are subject to enforcement by the Environmental Protection Agency (EPA) or by

citizens in addition to the State or Local agency.

As the deadlines for complying with MACT standards and title V operating permits approach, industry and State and local air pollution agencies have become increasingly focused on the need to adopt and implement federally-enforceable mechanisms to limit emissions from sources that desire to limit potential emissions to below major source levels. In fact, there are numerous options available which can be tailored by the States to provide such sources with simple and effective ways to qualify as minor sources. Because there appears to be some confusion and questions regarding how potential to emit limits may be established, EPA has decided to: (1) outline the available approaches to establishing potential to emit limitations, (2) describe developments related to the implementation of these various approaches, and (3) implement a transition policy that will allow certain sources to be treated as minor for a period of time sufficient for these sources to obtain a federally-enforceable limit.

Federal enforceability is an essential element of establishing limitations on a source's potential to emit. Federal enforceability ensures the conditions placed on emissions to limit a source's potential to emit are enforceable by EPA and citizens as a legal and practical matter, thereby providing the public with credible assurances that otherwise major sources are not avoiding applicable requirements of the Act. In order to ensure compliance with the Act, any approaches developed to allow sources to avoid the major source requirements must be supported by the Federal authorities granted to citizens and EPA. In addition, Federal enforceability provides source owners and operators with assurances that limitations they have obtained from a State or local agency will be recognized by EPA.

The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source's potential to emit. First, EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs. This requirement is based both on EPA's general interest in having the power to enforce "all relevant features of SIP's that are necessary for attainment and maintenance of NAAQS and PSD increments" (see 54 FR 27275, citing 48 FR 38748, August 25, 1983) as well as the specific goal of using national enforcement to ensure that the requirements of the Act are uniformly implemented throughout the nation (see 54 FR 27277). Second, limitations must be enforceable as a practical matter.

It is important to recognize that there are shared responsibilities on the part of EPA, State, and local agencies, and on source owners to create and implement approaches to creating acceptable limitations on potential emissions. The lead

responsibility for developing limitations on potential emissions rests primarily with source owners and State and local agencies. At the same time, EPA must work together with interested parties, including industry and States to ensure that clear guidance is established and that timely Federal input, including Federal approval actions, is provided where appropriate. The guidance in this memorandum is aimed towards continuing and improving this partnership.

Available Approaches for Creating Federally-enforceable Limitations on the Potential to Emit

There is no single "one size fits all" mechanism that would be appropriate for creating federally-enforceable limitations on potential emissions for all sources in all situations. The spectrum of available mechanisms should, however, ensure that State and local agencies can create federally-enforceable limitations without undue administrative burden to sources or the agency. With this in mind, EPA views the following types of programs, if submitted to and approved by EPA, as available to agencies seeking to establish federally-enforceable potential to emit limits:[1]

1. Federally-enforceable State operating permit programs (FESOPs) (non-title V). For complex sources with numerous and varying emission points, case-by-case permitting is generally needed for the establishment of limitations on the source's potential to emit. Such case-by-case permitting is often accomplished through a non-title V federally-enforceable State operating permit program. This type of permit program, and its basic elements, are described in guidance published in the Federal Register on June 28, 1989 (54 FR 27274). In short, the program must: (a) be approved into the SIP, (b) impose legal obligations to conform to the permit limitations, (c) provide for limits that are enforceable as a practical matter, (d) be issued in a process that provides for review and an opportunity for comment by the public and by EPA, and (e) ensure that there is no relaxation of otherwise applicable Federal requirements. The EPA believes that these type of programs can be used for both criteria pollutants and hazardous air pollutants, as described in the memorandum, "Approaches to Creating Federally-Enforceable Emissions Limits," November 3, 1993. This memorandum (referred to below as the November 1993 memorandum) is included for your information as Attachment 1. There are a number of important clarifications with respect to hazardous air pollutants subsequent to the November 1993 memorandum which are discussed

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[1]This is not an exhaustive list of considerations affecting potential to emit. Other federally-enforceable limits can be used, for example, source-specific SIP revisions. For brevity, we have included those which have the widest applicability.

below (see section entitled "Limitations on Hazardous Air Pollutants").

2. Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are relatively similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally-enforceable restrictions. One approach that has been used is to establish a general rule which creates federally-enforceable restrictions at one time for many sources (these rules have been referred to as "exclusionary" rules and by some permitting agencies as "prohibitory" rules). A specific suggested approach for volatile organic compounds (VOC) limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP and generally become effective upon approval by EPA.

3. General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category. Although this concept is generally thought of as an element of a title V permit program, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating potential to emit limits for groups of sources. Additionally, general permits can be issued under the auspices of a SIP-approved FESOP. The advantage of a general permit, when compared to an exclusionary rule, is that upon approval by EPA of the State's permit program, a general permit could be written for one or more additional source types without triggering the need for the formal SIP revision process.

4. Construction permits. Another type of case-by-case permit is a construction permit. These permits generally cover new and modified sources, and States have developed such permit programs as an element of their SIP's. As described in the November 1993 memorandum, these State major and minor new source review (NSR) construction permits can provide for federally-enforceable limitations on a source's potential to emit. Further discussion of the use of minor source NSR programs is contained in EPA's letter to Jason Grumet, NESCAUM, dated November 2, 1994,

which is contained in Attachment 3. As noted in this letter, the usefulness of minor NSR programs for the creation of potential to emit limitations can vary from State to State, and is somewhat dependent on the scope of a State's program.

5. Title V permits. Operating permits issued under the Federal title V operating permits program can, in some cases, provide a convenient and readily available mechanism to create federally-enforceable limits. Although the applicability date for part 70 permit programs is generally the driving force for most of the current concerns with respect to potential to emit, there are other programs, such as the section 112 air toxics program, for which title V permits may themselves be a useful mechanism for creating potential to emit limits. For example, many sources will be considered to be major by virtue of combustion emissions of nitrogen oxides or sulfur dioxide, and will be required to obtain part 70 permits. Such permits could be used to establish federally-enforceable limitations that could ensure that the source is not considered a major source of hazardous air pollutants.

Practicable Enforceability

If limitations--whether imposed by SIP rules or through individual or general permits--are incomplete or vague or unsupported by appropriate compliance records, enforcement by the States, citizens and EPA would not be effective. Consequently, in all cases, limitations and restrictions must be of sufficient quality and quantity to ensure accountability (see 54 FR 27283).

The EPA has issued several guidance documents explaining the requirements of practicable enforceability (e.g., "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989; memorandum from John Rasnic entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project," March 13, 1992). In general, practicable enforceability for a source-specific permit means that the permit's provisions must specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule. More specific guidance on these enforceability principles as they apply to rules and general permits is provided in Attachment 4.

Limitations on Hazardous Air Pollutants (HAP)

There are a number of important points to recognize with respect to the ability of existing State and local programs to create limitations for the 189 HAP listed in (or pursuant to) section 112(b) of the Act, consistent with the definitions of "potential to emit" and "federally-enforceable" in 40 CFR 63.2 (promulgated March 16, 1994, 59 FR 12408 in the part 63 General Provisions). The EPA believes that most State and local programs should have broad capabilities to handle the great majority of situations for which a potential to emit limitation on HAP is needed.

First, it is useful to note that the definition of potential to emit for the Federal air toxics program (see the subpart A "general provisions," section 63.2) considers, for purposes of controlling HAP emissions, federally-enforceable limitations on criteria pollutant emissions if "the effect such limitations would have on "[hazardous air pollutant] . . . emissions" is federally-enforceable (emphasis added). There are many examples of such criteria pollutant emission limits that are present in federally-enforceable State and local permits and rules. Examples would include a limitation constraining an operation to one (time limit specified) shift per day or limitations that effectively limit operations to 2000 hours per year. Other examples would include limitations on the amount of material used, for example a permit limitation constraining an operation to using no more than 100 gallons of paint per month. Additionally, federally-enforceable permit terms that, for example, required an incinerator to be operated and maintained at no less than 1600 degrees would have an obvious "effect" on the HAP present in the inlet stream.

Another federally-enforceable way criteria pollutant limitations affect HAP can be described as a "nested" HAP limit within a permit containing conditions limiting criteria pollutants. For example, the particular VOC's within a given operation may include toluene and xylene, which are also HAP. If the VOC-limiting permit has established limitations on the amount of toluene and xylene used as the means to reduce VOC, those limitations would have an obvious "effect" on HAP as well.

In cases as described above, the "effect" of criteria pollutant limits will be straightforward. In other cases, information may be needed on the nature of the HAP stream present. For example, a limit on VOC that ensured total VOC's of 20 tons per year may not ensure that each HAP present is less than 10 tons per year without further investigation. While the EPA intends to develop further technical guidance on situations for which additional permit terms and conditions may be needed to ensure that the "effect" is enforceable as a practical matter, the EPA intends to rely on State and local agencies to employ

care in drafting enforceable requirements which recognize obvious environmental and health concerns.

There are, of course, a few important pollutants which are HAP but are not criteria pollutants. Example of these would include methylene chloride and other pollutants which are considered nonreactive and therefore exempt from coverage as VOC's. Especially in cases where such pollutants are the only pollutants present, criteria pollutant emission limitations may not be sufficient to limit HAP. For such cases, the State or local agency will need to seek program approval under section 112(l) of the Act.

Section 112(l) provides a clear mechanism for approval of State and local air toxics programs for purposes of establishing HAP-specific PTE limits. The EPA intends, where appropriate, that in approving permitting programs into the SIP, to add appropriate language citing approval pursuant to section 112(l) as well. An example illustrating section 112(l) approval is the approval of the State of Ohio's program for limiting potential to emit (see 59 FR 53587, October 25, 1994). In this notice, EPA granted approval under section 112(l) for hazardous air pollutants aspects of a State program for limiting potential to emit. Such language can be added to any federally-enforceable State operating permit program, exclusionary rule, or NSR program update SIP approval notice so long as the State or local program has the authority to regulate HAP and meets other section 112(l) approval criteria. Transition issues related to such section 112(l) approvals are discussed below.

Determination of Maximum Capacity

While EPA and States have been calculating potential to emit for a number of years, EPA believes that it is important at this time to provide some clarification on what is meant in the definition of potential to emit by the "maximum capacity of a stationary source to emit under its physical and operational design." Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgements and factor them into estimates of a stationary source's potential to emit.

The EPA believes that the most straightforward examples of such inherent limitations is for single-emission unit type operations. For example, EPA does not believe that the "maximum capacity" language requires that owner of a paint spray booth at a small auto body shop must assume that (even if the source could be in operation year-round) spray equipment is operated 8760 hours per year in cases where there are inherent physical

limitations on the number of cars that can be painted within any given period of time. For larger sources involving multiple emissions units and complex operations, EPA believes it can be more problematic to identify the inherent limitations that may exist.

The EPA intends, within its resource constraints, to issue technical assistance in this area by providing information on the type of operational limits that may be considered acceptable to limit the potential to emit for certain individual small source categories.

Transition Guidance for Section 112 and Title V Applicability

Most, if not all, States have recognized the need to develop options for limiting the potential emissions of sources and are moving forward with one or more of the strategies described in the preceding sections in conjunction with the submission and implementation of their part 70 permit programs. However, EPA is aware of the concern of States and sources that title V or section 112 implementation will move ahead of the development and implementation of these options, leaving sources with actual emissions clearly below the major source thresholds potentially subject to part 70 and other major source requirements. Gaps could theoretically occur during the time period it takes for a State program to be designed and administratively adopted by the State, approved into the SIP by EPA, and implemented as needed to cover individual sources.

The EPA is committed to aiding all States in developing and implementing adequate, streamlined, and cost-effective vehicles for creating federally-enforceable limits on a source's potential emissions by the time that section 112 or title V requirements become effective. To help bridge any gaps, EPA will expedite its reviews of State exclusionary rules and operating permit rules by, among other things, coordinating the approval of these rules with the approval of the State's part 70 program and by using expeditious approval approaches such as "direct final" Federal Register notices to ensure that approval of these programs does not lag behind approval of the part 70 program.

In addition, in such approval notices EPA will affirm any limits established under the State's program since its adoption by the State but prior to Federal approval if such limits were established in accordance with the procedures and requirements of the approved program. An example of language affirming such limits was recently used in approving an Illinois SIP revision (see 57 FR 59931, included as Attachment 5).

The EPA remains concerned that even with expedited approvals and other strategies, sources may face gaps in the ability to acquire federally-enforceable potential to emit limits due to

delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the burden on States' implementation of title V, and to ensure that delays in EPA's approval of these types of programs will not cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources (i.e., those emitting under the 50 percent threshold) would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen

enforcement of the limits (this is appropriate given that the limits are being taken to avoid otherwise applicable Federal requirements). Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period. States interested in making use of this portion of the transition policy should work with their Regional Office to develop an appropriate certification process.

3. Limits for noncriteria HAP. For noncriteria HAP for which no existing federally-approved program is available for the creation of federally-enforceable limits, the 2-year transition period provides for sufficient time to gain approval pursuant to section 112(l). For the 2-year transition period, State restrictions on such noncriteria pollutants issued to sources with emissions above the 50 percent threshold would be treated by EPA as limiting a source's potential to emit, provided that: (a) the restrictions are enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits. Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period.

The Regional Offices should send this memorandum, including the attachments, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718, or Clara Poffenberger with the Air Enforcement Division at 202-564-8709.

Attachments

cc: Air Branch Chief, Region I-X
Regional Counsels

Attachment 1
November 3, 1993 memorandum

November 3, 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable Emissions Limits

FROM: John S. Seitz, Director /s/
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The new operating permits program under title V of the Clean Air Act (Act), combined with the additional and lower thresholds for "major" sources also provided by the 1990 Amendments to the Act, has led to greatly increased interest by State and local air pollution control agencies, as well as sources, in obtaining federally-enforceable limits on source potential to emit air pollutants. Such limits entitle sources to be considered "minor" for the purposes of title V permitting and various other requirements of the Act. Numerous parties have identified this as a high priority concern potentially involving thousands of sources in each of the larger States.

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants
(HAP's).

The purpose of this memorandum is to respond to these needs by announcing the availability of two further approaches to creating federally-enforceable emissions limits: the extension of existing criteria pollutant program mechanisms for HAP program purposes, and the creation of certain classes of standardized emissions limits by rule. We believe that these options are responsive to emerging air program implementation issues and provide a reasonable balance between the need for administrative streamlining and the need for emissions limits that are technically sound and enforceable.

Background

Various regulatory options already exist for the creation of federally-enforceable limits on potential to emit. These were summarized in a September 18, 1992 memorandum from John Calcagni, Director, Air Quality Management Division. That memorandum identified the five regulatory mechanisms generally seen as available. These are: State major and minor new source review (NSR) permits [if the NSR program has been approved into the State implementation plan (SIP) and meets certain procedural requirements]; operating permits based on programs approved into the SIP pursuant to the criteria in the June 28, 1989 Federal Register (54 FR 27274); and title V permits (including general permits). Also available are SIP limits for individual sources and limits for HAP's created through a State program approved pursuant to section 112(l) of the Act.

Regional Office and State air program officials realize that these five options are generally workable, but feel that the programs emerging from the 1990 Amendments present certain further needs that are not well met. They note that NSR is not always available, title V permitting can be more rigorous than appropriate for those sources that are in fact quite small, and that general permits have limitations in their usefulness. The use of State operating permits approved into the SIP pursuant to the June 28, 1989 Federal Register is generally considered to be a promising option for some of these transactions; however, these programs do not regulate toxics directly.

State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities: source-specific

preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(l) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(l), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(l) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics pursuant to the criteria set forth in the June 28, 1989 Federal Register. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

This is a significant opportunity to limit directly the emissions of HAP's. It also offers the advantage of the administrative efficiencies that arise from using existing administrative mechanisms, as opposed to creating additional ones.

States are encouraged to consult with EPA Regional Offices to discuss the details of adapting their current programs to carry out these additional functions. The EPA will consider State permitting

programs meeting the criteria in the June 28, 1989 Federal Register as being approvable for HAP program functions as well. States may submit their programs for implementing this process with their part 70 program submittals, or at such other time as they choose. The EPA has various options for administratively recognizing these State program submittals. The EPA plans initially to review these State programs as SIP review actions, but with official recognition pursuant to authorities in both sections 110 and 112. Once rulemaking pursuant to section 112(l) of the Act is completed, EPA expects to use the process developed in that rule for approving State programs for HAP's. The section 112(l) process may be especially useful prior to EPA approval and implementation of the State title V programs. The reader may wish to refer to the process for certain section 112(l) approvals proposed on May 19, 1993 (58 FR 29296) (see section 63.91).

The General Provisions (40 CFR part 63) establish the applicability framework for the implementation of section 112. In the final rule, EPA will indicate that State operating permits programs which meet the procedural requirements of the June 28, 1989 Federal Register can be used to develop federally- enforceable emissions limits for HAP's, thereby limiting a source's potential to emit. In addition, after we gain implementation experience, EPA will be evaluating the usefulness of further rulemaking to define more specific criteria by which this process may be used in the implementation of programs under section 112 of the Act. Any such rulemaking could similarly be incorporated into the General Provisions in part 63.

State-Standardized Processes Created by Rule to Establish Source-Specific, Federally-Enforceable Emissions Limits

State air program officials have highlighted specific types of sources that are of particular administrative concern because of their nature and number. These include sources whose emissions are primarily volatile organic compounds (VOC) arising from use of solvents or coatings, such as automobile body shops. Another example is fuel-burning sources that have low actual emissions because of limited hours of operation, but with the potential to emit sulfur dioxide in amounts sufficient to cause them to be classified as major sources.

The EPA recognizes that emissions limitations for some processes can be created through standardized protocols. For example, limitations on potential to emit could be established for certain VOC sources on the basis of limits on solvent use, backed up by recordkeeping and by periodic reporting. Similarly, limitations on sulfur dioxide emissions could be based on specified sulfur content of fuel and the source's obligation to limit usage to certain maximum amounts. Limits on hours of operation may be acceptable for certain others sources, such as standby boilers. In all cases, of course, the technical requirements would need to be supported by sufficient compliance procedures, especially monitoring and reporting, to be considered enforceable.

The EPA concludes that such protocols could be relied on to create federally-enforceable limitations on potential to emit if adopted through rulemaking and approved by EPA. Although such an approach is appropriate for only a limited number of source categories, these categories include large numbers of sources, such as dry cleaners, auto body shops, gas stations, printers, and surface coaters. If such standardized control protocols are sufficiently reliable and replicable, EPA and the public need not be involved in their application to individual sources, as long as the protocols themselves have been subject to notice and opportunity to comment and have been approved by EPA into the SIP.

To further illustrate this concept and to provide implementation support to the States, EPA has recently released guidance on one important way of using this process. This document, entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," was issued by D. Kent Berry, Acting Director, Air Quality Management Division, on October 15, 1993. It describes approvable processes by which States can create federally-enforceable emissions limits for VOC for large numbers of sources in a variety of source categories.

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate for a State to apply these limits to individual sources through a registration process rather than a permit. A source could simply submit a certification to the State committing to comply with the terms of an approved protocol. Violations of these certifications would constitute SIP violations, in the case of protocols approved into the SIP, and be subject to the same enforcement mechanisms as apply in the case of any other SIP violation. Such violations would, of course, also subject the source to enforcement for failure to comply with the requirements that apply to major sources, such as the requirement to obtain a title V permit or comply with various requirements of section 112 of the Act.

Some States have also indicated an interest in more expansive approaches to implementing this concept, such as making presumptive determinations of control equipment efficiency with respect to particular types of sources and pollutants. While such approaches are more complicated and present greater numbers of concerns in the EPA review process, they offer real potential if properly crafted. The EPA will evaluate State proposals and approve them if they are technically sound and enforceable as a practical matter.

States may elect to use this approach to create federally-enforceable emissions limits for sources of HAP's as well. Based on the same authorities in section 112 of the Act, as cited above in the case of operating permits, EPA can officially recognize such State program submittals. As with the operating permits option discussed in the preceding section, EPA plans initially to review these activities as SIP revisions, but with approval pursuant to

both sections 110 and 112 of the Act, and approve them through the section 112(l) process when that rule is final.

Implementation Guidance

As indicated above, the creation of federally-enforceable limits on a source's potential to emit involves the identification of the procedural mechanisms for these efforts, including the statutory basis for their approval by EPA, and the technical criteria necessary for their implementation. Today's guidance primarily addresses the procedural mechanisms available and the statutory basis for EPA approval.

The EPA will be providing further information with respect to the implementation of these concepts. As described above, the first portion of this guidance, addressing limits on VOC emissions, was issued on October 15, 1993. My office is currently working with Regional Offices and certain States in order to assist in the development of program options under consideration by those States. We will provide technical and regulatory support to other State programs and will make the results of these efforts publicly available through the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network bulletin board.

We will provide further support through the release of a document entitled "Enforceability Requirements for Limiting Potential to Emit Through SIP Rules and General Permits," which is currently undergoing final review within EPA. In addition, EPA will be highlighting options for use of existing technical guidance with respect to creating sound and enforceable emissions limits. An important example of such guidance is the EPA "Blue Book," which has been in use by States for the past 5 years as part of their VOC control programs.

States are encouraged to discuss program needs with their EPA Regional Offices. The OAQPS will work with them in addressing approvals. As indicated, additional technical guidance for implementing these approaches is underway and will be made publicly available soon. For further information, please call Kirt Cox at (919) 541-5399.

cc: Air Branch Chief, Regions I-X
Regional Counsel, Regions I-X
OAQPS Division Directors
A. Eckert
M. Winer
A. Schwartz
E. Hoerath

Attachment 2
California Example Rule

Background

State agencies and local agencies (such as the Air Pollution Control Districts in California) can adopt rules which place emissions limitations on a category of sources through a combination of limitations and compliance requirements. These rules, if practicably enforceable, adopted with adequate public process and approved into the SIP, can validly limit potential to emit. Moreover, because State or local rules can cover many sources with a single regulatory action, they are well-suited to cover large populations of smaller sources. Many States are finding that a combination of SIP rules or general permits for smaller sources combined with individual permits for larger sources provides the simplest means of ensuring that minor source emissions are adequately limited.

Discussion of California Rule

The EPA, the California Air Pollution Control Officers Association and the California Air Resources Board recently completed development of a model rule for use by the California Air Pollution Control Districts. Because the rule contains several innovations, including covering all source categories, and should prove to be an inexpensive and efficient means of limiting the potential emissions of thousands of sources in California, the EPA believes that parts of the rule may be helpful for other States to review and consider.

The proposed rule is designed to place smaller sources under annual emissions limits which restrict their "potential to emit" and thus their exposure to "major source" requirements of the Clean Air Act. The rule ensures compliance with the annual limit through a series of recordkeeping and reporting requirements. These requirements are tapered to reduce burdens as source size decreases. The rule creates three levels of responsibility. The first tier requires both recordkeeping and reporting. The second tier requires only recordkeeping with no reporting. For instance, sources that emit only attainment pollutants which limit their emissions to below 25 tons per year have no reporting requirement. For sources under 5 tons per year (or 2 tons per year for a single hazardous air pollutant), there is no specified recordkeeping or reporting requirements although these sources must still maintain sufficient records to demonstrate their compliance with the rule.

To the extent possible, the recordkeeping requirements are itemized by source category and are designed to take advantage of records that sources are already likely to maintain. Through these measures, the rule should assure the public that the sources subject to the rule are properly maintaining their emissions below major source levels, while maximizing source flexibility and minimizing paperwork.

There are other safeguards built into the rule and in California's overall regulatory scheme which add to the EPA's confidence that the proposal can work. The rule applies only to sources that agree to limit their emissions to 50 percent or less of the major source threshold. Sources with emissions above this level must either comply with all applicable "major source" requirements or secure a source-specific, federally-enforceable Air Pollution Control District permit that properly limits emissions to levels below major source thresholds. Some sources may be able to qualify for an "alternative operation limit" which places simple operating limits on a source's combustion of fuel, sale of gasoline or use of a solvent. Because of the ease with which compliance can be tracked with operational limits, the rule allows sources using these limits to go up to 80 percent of the major source threshold. Either way, EPA believes that the rule creates a sufficient compliance buffer.

Moreover, California has an extensive permit and inspection infrastructure that increases EPA's confidence that the rule will prove adequate for limiting emissions. California law requires that, upon annual renewal, each permit be reviewed to determine that the permit conditions are adequate to assure compliance with district rules and other applicable requirements. In addition, most California Air Pollution Control Districts have an extensive inspection program which means that compliance with the rule will be spot checked by inspectors visiting the source.

Finally, the rule is designed to provide smaller sources with a federally-enforceable means of limiting their potential emissions. The rule excludes sources that already have a federally enforceable operating permit, and it cannot be used to avoid complying with an permit required by the Air Pollution Control Districts.

Aside from these general observations, EPA did have a number of comments regarding specific language included in the rule. The three most significant comments are set forth below. However, States interested in using this rule as a model should be aware that it was specifically designed to fit with California State law and existing SIP provisions and that States may wish to consider making other changes to reflect their individual needs and requirements.

Section 2.7: In a PM-10 nonattainment area, PM-10 precursors may need to be included when determining whether a source is major as required by section 189(e) of the Clean Air Act. Districts adopting this model rule should consider whether the definition of "Major Source" in section 2.7 should be augmented to include sources of PM-10 precursors.

Section 4.2(D): The rule allows sources using air pollution control equipment to demonstrate compliance through the maintenance of general records on the unit and its operations. EPA has always been concerned with this provision since many pollution control units are only effective if specific operating procedures are followed. These specifics are best set and tracked in a source-specific, federally enforceable

permit. For this reason, section 1.3 sunsets the applicability of the draft rule, after January 1, 1999, to pollution control equipment. For the coverage to continue beyond that date, a district must extend the provision. The EPA will disapprove the extension if the experience with the rule demonstrates that more specific conditions are needed to ensure that pollution control devices are being used properly and continuously.

Section 4.2(E): In general, EPA does not favor the use of generic or catch-all recordkeeping requirements for compliance purposes. There is a fear that the records necessary to show compliance for individual source categories will not be specified by the generic provision and thus will not be maintained. For this reason, EPA urges the Board and the Districts to evaluate regularly whether specific recordkeeping requirements should be developed for additional categories. As we noted during our negotiations, EPA will evaluate this question after the rule is in effect for three years and the EPA may seek -- through a SIP call or through other mechanisms -- to require additional recordkeeping requirements if there are implementation problems with this generic category. The districts may wish to add to the rule a provision which would authorize them to add recordkeeping requirements for additional source categories without a further SIP revision.

State of California
Proposed Rule to Limit
Potential to Emit
January 11, 1995

1.0 APPLICABILITY

1.1 General Applicability: This rule shall apply to any stationary source which would, if it did not comply with the limitations set forth in this rule, have the potential to emit air contaminants equal to or in excess of the threshold for a major source of regulated air pollutants or a major source of hazardous air pollutants (HAPs) and which meets one of the following conditions:

A. In every 12-month period, the actual emissions of the stationary source are less than or equal to the emission limitations specified in section 3.1 below; or

B. In every 12-month period, at least 90 percent of the emissions from the stationary source are associated with an operation limited by any one of the alternative operational limits specified in section 6.1 below.

1.2 Stationary Source with De Minimis Emissions: The recordkeeping and reporting provisions in sections 4.0, 5.0 and 6.0 below shall not apply to a stationary source with de minimis emissions or operations as specified in either subsection A or B below:

A. In every 12-month period, the stationary source emits less than or equal to the following quantities of emissions:

1. 5 tons per year of a regulated air pollutant (excluding HAPs),

2. 2 tons per year of a single HAP,

3. 5 tons per year of any combination of HAPs, and

4. 20 percent of any lesser threshold for a single HAP that the United States Environmental Protection Agency (U.S. EPA) may establish by rule.

B. In every 12-month period, at least 90 percent of the stationary source's emissions are associated with an operation for which the throughput is less than or equal to one of the quantities specified in subsections 1 through 9 below:

1. 1,400 gallons of any combination of solvent-containing materials but no more than 550 gallons of any one solvent-containing material, provided that

the materials do not contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene;

2. 750 gallons of any combination of solvent-containing materials where the materials contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, but not more than 300 gallons of any one solvent-containing material;

3. ____ gallons of solvent-containing (or volatile organic compound containing) material used at a paint spray unit(s);[2]

4. 4,400,000 gallons of gasoline dispensed from equipment with Phase I and II vapor recovery systems;

5. 470,000 gallons of gasoline dispensed from equipment without Phase I and II vapor recovery systems;

6. 1,400 gallons of gasoline combusted;

7. 16,600 gallons of diesel fuel combusted;

8. 500,000 gallons of distillate oil combusted, or

9. 71,400,000 cubic feet of natural gas combusted.

Within 30 days of a written request by the District or the U.S. EPA, the owner or operator of a stationary source not maintaining records pursuant to sections 4.0 or 6.0 shall demonstrate that the stationary source's emissions or throughput are not in excess of the applicable quantities set forth in subsection A or B above.

1.3 Provision for Air Pollution Control Equipment: The owner or operator of a stationary source may take into account the operation of air pollution control equipment on the capacity of the source to emit an air contaminant if the equipment is required by Federal, State, or District rules and regulations or permit terms and conditions. The owner or operator of the stationary source shall maintain and operate such air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. This provision shall not apply after January 1, 1999 unless such operational limitation is federally enforceable or unless the District Board specifically extends this provision and it is submitted to the U.S. EPA. Such extension shall be valid

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[2]To be determined based on district SIP rules

unless, and until, the U.S. EPA disapproves the extension of this provision.

1.4 Exemption, Stationary Source Subject to Rule ____ (District Title V rule): This rule shall not apply to the following stationary sources:

A. Any stationary source whose actual emissions, throughput, or operation, at any time after the effective of this rule, is greater than the quantities specified in sections 3.1 or 6.1 below and which meets both of the following conditions:

1. The owner or operator has notified the District at least 30 days prior to any exceedance that s/he will submit an application for a Part 70 permit, or otherwise obtain federally-enforceable permit limits, and

2. A complete Part 70 permit application is received by the District, or the permit action to otherwise obtain federally-enforceable limits is completed, within 12 months of the date of notification.

However, the stationary source may be immediately subject to applicable federal requirements, including but not limited to, a maximum achievable control technology (MACT) standard.

B. Any stationary source that has applied for a Part 70 permit in a timely manner and in conformance with Rule ____ (the District's Title V rule), and is awaiting final action by the District and U.S. EPA.

C. Any stationary source required to obtain an operating permit under Rule ____ (the District's Title V rule) for any reason other than being a major source.

D. Any stationary source with a valid Part 70 permit.

Notwithstanding subsections B and D above, nothing in this section shall prevent any stationary source which has had a Part 70 permit from qualifying to comply with this rule in the future in lieu of maintaining an application for a Part 70 permit or upon rescission of a Part 70 permit if the owner or operator demonstrates that the stationary source is in compliance with the emissions limitations in section 3.1 below or an applicable alternative operational limit in section 6.1 below.

1.5 Exemption, Stationary Source with a Limitation on Potential to Emit: this rule shall not apply to any stationary source which has a valid operating permit with federally-enforceable conditions or other federally-enforceable limits limiting its

potential to emit to below the applicable threshold(s) for a major source as defined in sections 2.7 and 2.8 below.

1.6 Within three years of the effective date of Rule ____ (District Title V rule), the District shall maintain and make available to the public upon request, for each stationary source subject to this rule, information identifying the provisions of this rule applicable to the source.

1.7 This rule shall not relieve any stationary source from complying with requirements pertaining to any otherwise applicable preconstruction permit, or to replace a condition or term of any preconstruction permit, or any provision of a preconstruction permitting program.[3] This does not preclude issuance of any preconstruction permit with conditions or terms necessary to ensure compliance with this rule.

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[3]For example, PSD, NSR, and ATC

2.0 DEFINITIONS

All terms shall retain the definitions provided under 40 CFR Part 70.2 [alternatively, the District Title V rule] unless otherwise defined herein.

2.1 12-month period: A period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

2.2 Actual Emissions: The emissions of a regulated air pollutant from a stationary source for every 12-month period. Valid continuous emission monitoring data or source test data shall be preferentially used to determine actual emissions. In the absence of valid continuous emissions monitoring data or source test data, the basis for determining actual emissions shall be: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications, material volatile organic compound (VOC) content reports or laboratory analyses; other information required by this rule and applicable District, State and Federal regulations; or information requested in writing by the District. All calculations of actual emissions shall use U.S. EPA, California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions.

2.3 Alternative Operational Limit: A limit on a measurable parameter, such as hours of operation, throughput of materials, use of materials, or quantity of product, as specified in Section 6.0, Alternative Operational Limit and Requirements.

2.4 Emission Unit: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.

2.5 Federal Clean Air Act: The federal Clean Air Act (CAA) as amended in 1990 (42 U.S.C. section 7401 et seq.) and its implementing regulations.

2.6 Hazardous Air Pollutant: Any air pollutant listed pursuant to section 112(b) of the federal Clean Air Act.

2.7 Major Source of Regulated Air Pollutants (excluding HAPs): A stationary source that emits or has the potential to emit a regulated air pollutant (excluding HAPs) in quantities equal to or exceeding the lesser of any of the following thresholds:

A. 100 tons per year (tpy) of any regulated air pollutant;

B. 50 tpy of volatile organic compounds or oxides of nitrogen for a federal ozone nonattainment area classified as serious, 25 tpy for an area classified as severe, or 10 tpy for an area classified as extreme; and

C. 70 tpy of PM_{10} for a federal PM_{10} nonattainment area classified as serious.

Fugitive emissions of these pollutants shall be considered in calculating total emissions for stationary sources in accordance with 40 CFR Part 70.2 "Definitions- Major source(2)."

2.8 Major Source of Hazardous Air Pollutants: A stationary source that emits or has the potential to emit 10 tons per year or more of a single HAP listed in section 112(b) of the CAA, 25 tons per year or more of any combination of HAPs, or such lesser quantity as the U.S. EPA may establish by rule. Fugitive emissions of HAPs shall be considered in calculating emissions for all stationary sources. The definition of a major source of radionuclides shall be specified by rule by the U.S. EPA .

2.9 Part 70 Permit: An operating permit issued to a stationary source pursuant to an interim, partial or final Title V program approved by the U.S. EPA.

2.10 Potential to Emit: The maximum capacity of a stationary source to emit a regulated air pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation is federally enforceable.

2.11 Process Statement: An annual report on permitted emission units from an owner or operator of a stationary source certifying under penalty of perjury the following: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation; and any other information required by this rule or requested in writing by the District.

2.12 Regulated Air Pollutant: The following air pollutants are regulated:

A. Oxides of nitrogen and volatile organic compounds;

B. Any pollutant for which a national ambient air quality standard has been promulgated;

C. Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the federal Clean Air Act;

D. Any pollutant that is subject to any standard promulgated under section 111 of the federal Clean Air Act; and

E. Any pollutant subject to a standard or requirement promulgated pursuant to section 112 of the federal Clean Air Act, including:

1. Any pollutant listed pursuant to section 112(r) (Prevention of Accidental Releases) shall be considered a regulated air pollutant upon promulgation of the list.

2. Any HAP subject to a standard or other requirement promulgated by the U.S. EPA pursuant to section 112(d) or adopted by the District pursuant to 112(g) and (j) shall be considered a regulated air pollutant for all sources or categories of sources: 1) upon promulgation of the standard or requirement, or 2) 18 months after the standard or requirement was scheduled to be promulgated pursuant to section 112(e)(3).

3. Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. EPA promulgation or scheduled promulgation of an emissions limitation shall be considered a regulated air pollutant when the determination is made pursuant to section 112(g)(2). In case-by-case emissions limitation determinations, the HAP shall be considered a regulated air pollutant only for the individual source for which the emissions limitation determination was made.

3.0 EMISSION LIMITATIONS

3.1 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, no stationary source subject to this rule shall emit in every 12-month period more than the following quantities of emissions:

A. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs),

B. 5 tons per year of a single HAP,

C. 12.5 tons per year of any combination of HAPs, and

D. 50 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

3.2 The APCO shall evaluate a stationary source's compliance with the emission limitations in section 3.1 above as part of the District's annual permit renewal process required by Health & Safety Code section 42301(e). In performing the evaluation,

the APCO shall consider any annual process statement submitted pursuant to Section 5.0, Reporting Requirements. In the absence of valid continuous emission monitoring data or source test data, actual emissions shall be calculated using emissions factors approved by the U.S. EPA , CARB, or the APCO.

3.3 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, the owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in actual emissions that exceed the limits specified in section 3.1 above.

4.0 RECORDKEEPING REQUIREMENTS

Immediately after adoption of this rule, the owner or operator of a stationary source subject to this rule shall comply with any applicable recordkeeping requirements in this section. However, for a stationary source operating under an alternative operational limit, the owner or operator shall instead comply with the applicable recordkeeping and reporting requirements specified in Section 6.0, Alternative Operational Limit and Requirements. The recordkeeping requirements of this rule shall not replace any recordkeeping requirement contained in an operating permit or in a District, State, or Federal rule or regulation.

4.1. A stationary source previously covered by the provisions in section 1.2 above shall comply with the applicable provisions of section 4.0 above and sections 5.0 and 6.0 below if the stationary source exceeds the quantities specified in section 1.2.A above.

4.2 The owner or operator of a stationary source subject to this rule shall keep and maintain records for each permitted emission unit or groups of permitted emission units[4] sufficient to determine actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years, and be made available to District, CARB, or U.S. EPA staff upon request.

A. Coating/Solvent Emission Unit

The owner or operator of a stationary source subject to this rule that contains a coating/solvent emission unit

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[4]In some cases it may be appropriate to keep records on groups of emission units which are connected in series. Examples are internal combustion engines in the oil fields with a common fuel line, or a series of paint spray booths with a common feed.

or uses a coating, solvent, ink or adhesive shall keep and maintain the following records:

1. A current list of all coatings, solvents, inks and adhesives in use. This list shall include: information on the manufacturer, brand, product name or code, VOC content in grams per liter or pounds per gallon, HAPS content in grams per liter or pounds per gallon, or manufacturer's product specifications, material VOC content reports or laboratory analyses providing this information;

2. A description of any equipment used during and after coating/solvent application, including type, make and model; maximum design process rate or throughput; control device(s) type and description (if any); and a description of the coating/solvent application/drying method(s) employed;

3. A monthly log of the consumption of each solvent (including solvents used in clean-up and surface preparation), coating, ink and adhesive used; and

4. All purchase orders, invoices, and other documents to support information in the monthly log.

B. Organic Liquid Storage Unit

The owner or operator of a stationary source subject to this rule that contains a permitted organic liquid storage unit shall keep and maintain the following records:

1. A monthly log identifying the liquid stored and monthly throughput; and

2. Information on the tank design and specifications including control equipment.

C. Combustion Emission Unit

The owner or operator of a stationary source subject to this rule that contains a combustion emission unit shall keep and maintain the following records:

1. Information on equipment type, make and model, maximum design process rate or maximum power input/output, minimum operating temperature (for thermal oxidizers) and capacity, control device(s) type and description (if any) and all source test information; and

2. A monthly log of hours of operation, fuel type, fuel usage, fuel heating value (for non-fossil fuels; in

terms of BTU/lb or BTU/gal), percent sulfur for fuel oil and coal, and percent nitrogen for coal.

D. Emission Control Unit

The owner or operator of a stationary source subject to this rule that contains an emission control unit shall keep and maintain the following records:

1. Information on equipment type and description, make and model, and emission units served by the control unit;

2. Information on equipment design including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data (type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and

3. A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.

E. General Emission Unit

The owner or operator of a stationary source subject to this rule that contains an emission unit not included in subsections A, B or C above shall keep and maintain the following records:

1. Information on the process and equipment including the following: equipment type, description, make and model; maximum design process rate or throughput; control device(s) type and description (if any);

2. Any additional information requested in writing by the APCO;

3. A monthly log of operating hours, each raw material used and its amount, each product produced and its production rate; and

4. Purchase orders, invoices, and other documents to support information in the monthly log.

5.0 REPORTING REQUIREMENTS

5.1 At the time of annual renewal of a permit to operate under Rule _____ (the District's general permitting rule), each owner or operator of a stationary source subject to this rule shall submit to the District a process statement. The statement shall be signed by the owner or operator and certify that the information provided is accurate and true.

5.2 For the purpose of determining compliance with this rule, this requirement shall not apply to stationary sources which emit in every 12-month period less than or equal to the following quantities:

A. For any regulated air pollutant (excluding HAPs),

1. 25 tons per year including a regulated air pollutant for which the District has a federal area designation of attainment, unclassified, transitional, or moderate nonattainment,

2. 15 tons per year for a regulated air pollutant for which the District has a federal area designation of serious nonattainment,

3. 6.25 tons per year for a regulated air pollutant for which the District has a federal area designation of severe nonattainment,

B. 2.5 tons per year of a single HAP,

C. 6.25 tons per year of any combination of HAPs, and

D. 25 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

5.3 A stationary source previously covered by provisions in section 5.2 above shall comply with the provisions of section 5.1 above if the stationary source exceeds the quantities specified in section 5.2.

5.4 Any additional information requested by the APCO under section 5.1 above shall be submitted to the APCO within 30 days of the date of request.

6.0 ALTERNATIVE OPERATIONAL LIMIT AND REQUIREMENTS

[The District may propose additional alternative operational limits]

The owner or operator may operate the permitted emission units at a stationary source subject to this rule under any one alternative operational limit, provided that at least 90 percent of the stationary source's emissions in every 12-month period are associated with the operation(s) limited by the alternative operational limit.

6.1 Upon choosing to operate a stationary source subject to this rule under any one alternative operational limit, the owner or operator shall operate the stationary source in compliance with the alternative operational limit and comply with the specified recordkeeping and reporting requirements.

A. The owner or operator shall report within 24 hours to the APCO any exceedance of the alternative operational limit.

B. The owner or operator shall maintain all purchase orders, invoices, and other documents to support information required to be maintained in a monthly log. Records required under this section shall be maintained on site for five years and be made available to District or U.S. EPA staff upon request.

C. Gasoline Dispensing Facility Equipment with Phase I and II Vapor Recovery Systems

The owner or operator shall operate the gasoline dispensing equipment in compliance with the following requirements:

1. No more than 7,000,000 gallons of gasoline shall be dispensed in every 12-month period.

2. A monthly log of gallons of gasoline dispensed in the preceding month with a monthly calculation of the total gallons dispensed in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

D. Degreasing or Solvent-Using Unit

The owner or operator shall operate the degreasing or solvent-using unit(s) in compliance with the following requirements:

1. a. If the solvents do not include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 5,400 gallons of any combination of solvent-containing materials and no more than 2,200 gallons of any one solvent-containing material shall be used in every 12-month period,.

   b. If the solvents include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 2,900 gallons of any combination of solvent-containing materials and no more than 1,200 gallons of any one solvent-containing material shall be used in every 12-month period.

2. A monthly log of amount and type of solvent used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

E. Paint Spraying Unit[5]

The owner or operator shall operate the paint spraying unit(s) in compliance with the following requirements:

1. The total usage rate of all VOC-containing materials, including but not limited to, coatings, thinners, reducers, and cleanup solution shall not exceed _____ gallons in every 12-month period.

2. A monthly log of the gallons of VOC-containing materials used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

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[5]To be determined based on District SIP rules

F. Diesel-Fueled Emergency Standby Engine(s) with Output Less Than 1,000 Brake Horsepower

[Depending on the District's federal ozone attainment status, the District will adopt either subsection 1.a, 1.b, or 1.c below.]

The owner or operator shall operate the emergency standby engine(s) in compliance with the following requirements:

1. a. For a federal ozone area designation of attainment, unclassified, transitional, or moderate nonattainment, the emergency standby engine(s) shall not operate more than 5,200 hours in every 12-month period and shall not use more than 265,000 gallons of diesel fuel in every 12-month period.

   b. For a federal ozone nonattainment area classified as serious, the emergency standby engine(s) shall not operate more than 2,600 hours in every 12-month period and shall not use more than 133,000 gallons of diesel fuel in every 12-month period.

   c. For a federal ozone nonattainment area classified as severe, the emergency standby engine(s) shall not operate more than 1,300 hours in 12-month period and shall not use more than 66,000 gallons of diesel fuel in every 12-month period.

2. A monthly log of hours of operation, gallons of fuel used, and a monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

6.2 The owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in an exceedance of an applicable operational limit specified in section 6.1 above.

7.0 VIOLATIONS

7.1 Failure to comply with any of the applicable provisions of this rule shall constitute a violation of this rule. Each day

during which a violation of this rule occurs is a separate offense.

7.2 A stationary source subject to this rule shall be subject to applicable federal requirements for a major source, including Rule ____ (District Title V rule) when the conditions specified in either subsections A or B below, occur:

A. Commencing on the first day following every 12-month period in which the stationary source exceeds a limit specified in section 3.1 above and any applicable alternative operational limit specified in section 6.1, above, or

B. Commencing on the first day following every 12-month period in which the owner or operator can not demonstrate that the stationary source is in compliance with the limits in section 3.1 above or any applicable alternative operational limit specified in section 6.1 above.

Attachment 3
November 2, 1994 Letter Describing Use of Minor NSR Programs

November 2, 1995

Mr. Jason Grumet
Executive Director, Northeast States
for Coordinated Air Use Management
129 Portland Street
Boston, Massachusetts 02114

Dear Mr. Grumet:

This is in response to Mr. Michael Bradley's March 22, 1994 letter to Mary Nichols seeking clarification of the Federal enforceability of State's existing minor new source review (NSR) programs. It is my understanding that some of the NESCAUM States are interested in using their existing minor NSR programs to limit a source's potential to emit so as to allow sources to legally avoid being considered a major source for title V purposes.

In my November 3, 1993 memorandum entitled "Approaches to Creating Federally-Enforceable Emission Limits," I described approaches that States could use to limit a source's potential to emit for title V purposes. While a number of approaches are acceptable, the Environmental Protection Agency (EPA) has promoted the use of State operating permits programs approved under sections 110 and 112(l), pursuant to the criteria set forth in the June 28, 1989 Federal Register. Among other things, these criteria include an opportunity for public and EPA review and require that permit conditions be practically enforceable. Several States have followed EPA's recommendation and have either adopted these requirements or are in the process of doing so.

The Agency recognizes the use of other approaches as well. In response to your question, EPA's position is that minor NSR permits issued under programs that have already been approved into the State implementation plan (SIP) are federally enforceable. Thus, EPA allows the use of federally-enforceable minor NSR permits to limit a source's potential to emit provided that the scope of a State's program allows for this and that the minor NSR permits are in fact enforceable as a practical matter.

Because minor NSR programs are essentially preconstruction review programs for new sources and modifications to existing sources, minor NSR programs can generally be used to limit a

source's potential emissions when such limits are taken in conjunction with a preconstruction permit action. In addition, please note that the term "modification" generally encompasses both physical changes and changes in the method of operation at an existing source (see Clean Air Act section 111(a)(4)). Thus, the scope of some, though not all, minor NSR programs is broad enough to be used to also limit a source's potential to emit for nonconstruction-related events. This occurs where the modification component of State programs extends to both physical changes and changes in the method of operation. In these cases, where a voluntary reduction in the method of operation (e.g., limit in hours of operation or production rate) by itself is considered a modification for minor NSR permitting, a source may reduce its hours of operation or production rate and make such a change federally enforceable through limits in its minor NSR permit.

Some States' minor NSR programs are written so as to preclude a source from limiting its potential to emit absent an increase in emissions. There may be other limitations on the scope of these programs as well. Since there is considerable variation among State minor NSR programs, a review of any individual State program would be necessary to determine its ability to limit a source's potential to emit. It may be beneficial for States to contact the appropriate EPA Regional Office if there are questions about the scope of the SIP-approved minor NSR program.

Minor NSR programs have generally been used in the past to limit a source's potential to emit for criteria pollutants. There is a growing need for sources to limit their potential to emit for toxic pollutants as well. The EPA is currently considering ways in which a State may limit the potential to emit of toxic pollutants, including possible uses of existing minor NSR programs. I plan to keep you and others aware of our efforts in this regard.

You should also be aware that a recent court ruling has called into question the Federal enforceability of a State minor NSR permit that does not meet the public participation requirements of current EPA regulations despite SIP approval of the State's program [see United States v. Marine Shale Processors, No. 90-1240 (E.D. La.) (bench ruling), June 15, 1994]. In that case involving extensive alleged violations of the permit terms, the court held that EPA could not enforce the terms of the minor NSR permit. The court subsequently ruled that the company could not rely on the permit to limit its potential to emit, and thus was liable for having failed to obtain a major

NSR permit. The outcome of this case suggests that States should proceed cautiously in relying on minor NSR programs to limit potential to emit where the program does not actually provide public participation.

In summary, EPA has provided guidance on approaches that are available to limit a source's potential to emit. The Agency recommends approaches that meet the criteria set forth in the June 28, 1989 Federal Register. Many States are taking action to adopt such programs. With respect to minor NSR permits, EPA believes that permits conditions issued in accordance with existing State minor NSR programs that have been approved into the SIP, and which are enforceable as a practical matter, are federally enforceable and can be used to limit potential to emit. Caution is advised, however, with respect to permits that do not meet procedural requirements. These programs are primarily preconstruction review programs although in many cases they can also limit a source's potential to emit in conjunction with operational changes.

As you have noted, title V issues are complicated and resource intensive. In order for the title V program to be successfully implemented, it is important that States and EPA work cooperatively in developing operating permits programs. Your comments and recommendations on program development issues are welcome.

We appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

/s/

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Air Division Director, Regions I-X

Attachment 4
January 25, 1995 Guidance on Practicable Enforceability

January 25, 1995

SUBJECT: Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits

FROM: Kathie A. Stein, Director /s/
Air Enforcement Division

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Attached is a guidance document developed over the past year by the former Stationary Source Compliance Division in coordination with the Air Enforcement Division, Office of Air Quality Planning and Standards, OAR's Office of Policy Analysis and Review, and the Office of General Counsel, as well as with significant input from several Regions.

A number of permitting authorities have begun discussions with or have submitted programs for review by EPA that would provide alternative mechanisms for limiting potential to emit. Several authorities have submitted SIP rules and at least one State has been developing a State general permit approach. We believe that this guidance is important to assist the EPA Regions as well as States in approving and developing such approaches.

For additional information regarding this guidance, please contact me or Clara Poffenberger of my staff at (202) 564-8709.

cc: John Rasnic, Director
Manufacturing, Energy, and Transportation Division
Office of Compliance

Air Branch Chiefs, Regions I - X

Enforceability Requirements for Limiting Potential to Emit Through SIP and §112 Rules and General Permits

Introduction

As several EPA guidances describe, there are several mechanisms available for sources to limit potential to emit. EPA guidances have also described the importance of practical enforceability of the means used to limit potential to emit. This guidance is intended to provide additional guidance on practical enforceability for such limits. We provide references for guidances on practical enforceability for permits and rules in general and provide guidance in this document for application of the same principles to "limitations established by rule or general permit," as described in the guidance document issued January 25, 1995, entitled "Options for Limiting Potential to Emit (PTE) of a Stationary Source under section 112 and Title V of the Clean Air Act (Act)." The description is as follows:

> Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable. restrictions. One approach that has been used is to establish a general rule which creates federally enforceable restrictions at one time for many sources (these rules have been referred to as "prohibitory" or "exclusionary" rules[1]). The concept of exclusionary rules is described in detail in the November 3, 1993 memorandum ["Approaches to Creating Federally Enforceable Emissions Limits," from John S. Seitz]. A specific suggested approach for VOC limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP or 112 program and generally become effective upon approval by the EPA.
>
> General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied

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[1] The EPA prefers the term "exclusionary rule" in that this phrase is a less ambiguous description of the overall purpose of these rules.

with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating synthetic minor sources. Additionally, FESOP [Federally Enforceable State Operating Permit, usually referring to Title I State Operating Permit Programs approved under the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule, is that upon approval by the EPA of the State's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995, Seitz and Van Heuvelen memorandum, page 4.)

SIP or § 112 Rules

Source-category standards approved in the SIP or under 112, if enforceable as a practical matter, can be used as federally enforceable limits on potential to emit. Such provisions require public participation and EPA review. Once a specific source qualifies under the applicability requirements of the source-category rule, additional public participation is not required to make the limits federally enforceable as a matter of legal sufficiency since the rule itself underwent public participation and EPA review. The rule must still be enforceable as a practical matter in order to be considered federally enforceable. A source that violates this type of rule limiting potential to emit below major source thresholds or is later determined not to qualify for coverage under the rule, could be subject to enforcement action for violation of the rule and for constructing or operating without a proper permit (a part 70 permit, a New Source Review permit, or operating without meeting §112 requirements, or any combination thereof).

General Permits

The Title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as a major source. In other words, general permits may be used to limit the potential to emit

for numerous similar sources. However, general permits must also meet both legal and practical federal enforceability requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued after opportunity for public participation and EPA and affected State review, the permitting authority may grant or deny a source's request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

State SIP or 112(l) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(l), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(l) program requirements without going through the SIP or 112(l) approval process for each general permit or revision of a general permit. The program is also separate from title V, like title I state operating permits, and issuance and revisions of the permits are not required to comply with title V procedures.

Once a program is approved, issuing and revising general permits should be significantly less burdensome and time- consuming for State legislative and rulemaking authorities. The EPA review should also be less burdensome and time-consuming. After a program is approved, permitting authorities have the flexibility to submit and issue general permits as needed rather than submitting them all at once as part of a SIP submittal. Given the reduced procedural burden, permitting authorities should be able to issue general permits to small groups or categories or sources rather than attempt to cover broad categories with a generic rule. We anticipate that specific permit requirements for general permits may be readily developed with the assistance of interested industry groups.

The State general permit approach may allow sources to meet the federal enforceability requirements more easily than other approaches. However, to use this approach, States must have a federally enforceable program that provides the State the authority to issue such permits; to accomplish this, EPA must approve the program into the SIP or pursuant to section 112(l) of the Clean Air Act.

Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated

its position that controls and limitations used to limit a source's potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo "Limiting Potential to Emit in New Source Permitting" from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274). Additional guidance can also be found in United States v. Louisiana Pacific, 682 F. Supp. 1122 (D. Colo. 1987), 682 F. Supp 1141 (D. Colo. 1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See "Use of Long Term Rolling Averages to Limit Potential to Emit," from John B. Rasnic to David Kee, February 24, 1992; "Limiting Potential to Emit" from Mamie Miller to George Czerniak, August 5, 1992; "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and "3M Tape Manufacturing Division Plant, St. Paul, Minnesota" from John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. See "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency" from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1987 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, recordkeeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based on these precedents, this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, recordkeeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

This guidance will address requirements (4) and (5) first as they are concepts that are unique to rules and general permits.

A. Specific Applicability

Rules and general permits designed to limit potential to emit must be specific as to the emission units or sources covered by the rule or permit. In other words, the rule or permit must clearly identify the category(ies) of sources that qualify for the rule's coverage. The rule must apply to categories of sources that are defined specifically or narrowly enough so that specific limits and compliance monitoring techniques can be identified and achieved by all sources in the categories defined.

A rule or general permit that covers a homogeneous group of sources should allow standards to be set that limit potential to emit and provide the specific monitoring requirements. (Monitoring is more fully addressed in section D.) The State can allow for generic control efficiencies where technically sound and appropriate, depending on the extent of the application and ability to monitor compliance with resultant emission limits. Similarly, specific and narrow applicability may allow generic limits on material usage or limits on hours of operation to be sufficient. For example, a rule or general permit that applies to fossil-fuel fired boilers of a certain size may allow for limits on material usage, such as fuel-type and quantity. A rule or general permit that applies only to standby diesel generators or emergency generators may allow restrictions on hours of operation to limit potential to emit. The necessary compliance terms (i.e., monitoring or recordkeeping) associated with any of these limits, such as with hours of operation, can readily be specified in the rule or the general permit itself.

General permits under Title V are assumed to include this enforceability principle because the Part 70 regulations set out specific criteria that States should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

> "categories of sources covered by general permits should be generally homogenous in terms of operations, processes, and emissions. All sources in the category should have essentially similar operations or processes and emit pollutants with similar characteristics."

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or recordkeeping." Examples of source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

The rule or general permit should provide specific reporting requirements as part of the compliance method. Although the compliance method for all sources must include recordkeeping requirements, the permitting authority may make a determination that reporting requirements for small sources would provide minimal additional compliance assurance. Where ongoing reporting requirements are determined not to be reasonable for a category of sources, the rule or general permit should still provide that the source notify the permitting authority of its coverage by the rule or the permit. In the limited situation where all the sources described in a source category are required to comply with the all of the provisions of a rule or general permit, notice is not needed. However, where there are no reporting requirements and no opt-in provisions, the permitting authority must provide the public with the names and locations of sources subject to the rule or permit.

For Title V general permits, Part 70 requires sources to submit an application for a general permit which must be approved or disapproved by the permitting authority. For SIP or §112 rules and SIP or §112 general permits, in response to receiving the notice or application, the permitting authority may issue an individual permit, or alternatively, a letter or certification. The permitting authority may also determine initially whether it will issue a response for each individual application or notice, and may initially specify a reasonable time period after which a source that has submitted an application or notice will be deemed to be authorized to operate under the general permit or SIP or §112 rule.

C. Specific Technically Accurate Limits

The rule or general permit issued pursuant to the SIP or §112 must specify technically accurate limits on the potential to emit. The rule or general permit must clearly specify the limits that apply, and include the specific associated compliance monitoring. (The compliance monitoring requirements are discussed further in the next section.) The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations.

The 1987 policy on SIP enforceability states that limitations "must be sufficiently specific so that a source is fairly on notice as to the standard it must meet." For example, "alternative equivalent technique" provisions should not be approved without clarification concerning the time period over which equivalency is measured as well as whether the equivalency applies on a per source or per line basis or is facility-wide.

Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based. Similarly, material usage limits such as fuel limits, as stated above, require specifying the type of fuel and may require specifying other operating parameters.

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

D. Specific Compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and clarify which methods are used for making a direct determination of compliance with the potential to emit limitations. "Monitoring" refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various parameters of process or control devices (e.g. temperature,

pressure drop, fuel usage) and recordkeeping of parameters that have been limited, such as hours of operation, production levels, or raw material usage. Without a verifiable plantwide emission limit, verifiable emission limits must be assigned to each unit or group of units subject to the rule or general permit. Where monitoring cannot be used to determine emissions directly, limits on appropriate operating parameters must be established for the units or source, and monitoring must verify compliance with those limits. The monitoring must be sufficient to yield data from the relevant time period that is representative of the source's compliance with the standard or limit. Continuous emissions monitoring, especially in the case of smaller sources, is not required.

E. Practicably Enforceable Averaging Times

The averaging time for all limits must be practicably enforceable. In other words, the averaging time period must readily allow for determination of compliance. EPA policy expresses a preference toward short term limits, generally daily but not to exceed one month. However, EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified. See June 13, 1989 "Guidance on Limiting Potential to Emit," February 24, 1992 Memorandum "Use of Long Term Rolling Averages to Limit Potential to Emit" from John Rasnic to David Kee, and March 13, 1992 "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project" from John B. Rasnic to David Kee, stating that determinations to allow an annual rolling average versus a shorter term limit must be made on a case by case basis. Various factors weigh in favor of allowing a long term rolling average, such as historically unpredictable variations in emissions. Other factors may weigh in favor of a shorter term limit, such as the inability to set interim limits during the first year. The permitting agency must make a determination as to what monitoring and averaging period is warranted for the particular source-category in light of how close the allowable emissions would be to the applicability threshold.

F. Clearly Recognized Enforcement

Violations of limits imposed by the rule or general permit that limit potential to emit constitute violations of major source requirements. In other words, the source would be violating a "synthetic minor" requirement which may result in the source being treated as a major source under Titles I and V. The 1989 Federal Register Notice provides for separate enforcement and permitting treatment depending on whether the source subsequently chooses to become major or remain minor. Thus, violations of the rule or general permit or violation of the specific conditions of the rule or general permit subjects the source to potential enforcement under the Clean Air Act and state law. The operating permit rule states that notwithstanding the shield provisions of part 70, the source subject to a general permit may be subject to enforcement action for operating without a part 70 permit if the source is later determined

not to qualify for the conditions and terms of the general permit. Moreover, violation of any of the conditions of the rule or general permit may result in a different determination of the source's potential to emit and thus may subject the source to major source requirements and to enforcement action for failure to comply with major source requirements from the initial determination.

Rule Requirements for State General Permit Programs

As discussed above, general permit programs must be submitted to EPA for approval under SIP authority or under section 112(l), or both, depending on its particular pollutant application. SIP and 112(l) approval and rulemaking procedures must be met, including public notice and comment. The specific application of the enforceability principles for establishing State SIP or §112(l) general permit programs require that the rule establishing the program set out these principles as rule requirements. In other words, these principles must be specific rule requirements to be met by each general permit.

The rule establishing the program must require that (1) general permits apply to a specific and narrow category of sources; (2) sources electing coverage under general permits, where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate (verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance monitoring requirements; (5) limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the State and federal requirements and may result in the source being subject to major source requirements.

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

Finally, sources remain liable for compliance with major source requirements if the specific application of a general permit to the source does not limit the source's potential to emit below major source or major modification thresholds. (The limits provided in these mechanisms may actually limit the potential to emit of sources but may not limit the potential to emit for some sources to below the threshold necessary to avoid major source requirements. For example, a general permit for industrial boilers may in fact provide limits that are sufficient to bring a source with only two or three boilers to below the subject thresholds, but a source with more than three boilers may have a limited PTE but not limited below the major

source threshold.) Also, where the source is required to use another mechanism to limit potential to emit, i.e., a construction permit, the general permit may not be relied upon by the source or the State to limit potential to emit.

Permits issued pursuant to the approved program, meeting the above requirements, are adequate to provide federally enforceable limits on potential to emit for New Source Review, title V, and section 112 programs as long as they are approved pursuant to SIP (section 110) and section 112(l) authorities.

Attachment 5
Example Language for Affirming Limits

[Note: the following language is taken from the Thursday December 17, 1992 Federal Register, page 59931. To place this excerpt into context, readers are encouraged to obtain the entire Federal Register notice]

> "The USEPA today finds the existing Illinois SIP regulations to be consistent with federal requirements. If the State followed its own procedures, each permit issued under this regulation was subject to public notice and prior USEPA review. Therefore, USEPA will consider all operating permits issued which were processed in a manner consistent with both the State regulations and the five criteria to be federally enforceable with the promulgation of this rule provided that any permits that the State wishes to make federally enforceable are submitted to USEPA and accompanied by documentation that the procedures approved today have been followed. USEPA will expeditiously review any individual permits so submitted to ensure their conformity to the program requirements."

A.7.7

REF # [Other REF #'s] DOC@	DATE AUTHOR Document Title or Description	ABSTRACT Other Documents to which this Memo Refers: *Sections of 40 CFR 70 to which this Memo Applies:*
A.7.7 [A.4.6] @A.4.6	5/16/95 Seitz, John S. **Potential to Emit for MACT Standards—Guidance on Timing Issues**	1) Existing sources that have a major HAP source PTE may switch to area (minor) source status at any time until the "first compliance date" of the MACT standard. When a standard has multiple, staggered compliance dates, the relevant date is the first substantive compliance date (e.g., for an emission limitation, leak detection and repair program, work practice measure, etc.). 2) New sources must have a PTE for HAP below the major source threshold no later than the promulgation date of the standard or the date of startup of the source, whichever is later. 3) Facilities that are major sources for HAPs on the "first compliance date" are required to comply permanently with the MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained. This is termed the "once in, always in" policy. 4) A facility subject to a MACT standard is not necessarily a major source for future MACT standards. Example: A facility has degreasing operations with a PTE of 30 tpy and a coating operating with a PTE of 5 tpy. After complying with the MACT, the PTE for degreasing is 3 tpy. Therefore, the total PTE for the source is now 8 tpy, which is below the major source threshold, so the source is an area source for subsequent standards. 5) The residual risk program under §112(f) and the urban area source program under §112(c)(3) will protect public health for sources that avoid MACT by becoming area sources. Refers to: 1/25/95 Seitz memo (see A.7.6—NOT attached) *§70.2 (major source, potential to emit)*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

SEP 6 1995

MEMORANDUM

SUBJECT: Calculating Potential to Emit (PTE) for Emergency Generators

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The purpose of this guidance is to address the determination of PTE for emergency electrical generators.

Background

In a memorandum dated January 25, 1995, the Environmental Protection Agency (EPA) addressed a number of issues related to the determination of a source's PTE under section 112 and title V of the Clean Air Act (Act). One of the issues discussed in the memorandum was the term "maximum capacity of a stationary source to emit under its physical and operational design," which is part of the definition of "potential to emit." The memorandum clarified that inherent physical limitations, and operational design features which restrict the potential emissions of individual emission units, can be taken into account. This clarification was intended to address facilities for which the theoretical use of equipment is much higher than could ever actually occur in practice. For such facilities, if their physical limitations or operational design features are not taken

into account, the potential emissions could be overestimated and consequently the source owner could be subject to the Act requirements affecting major sources. Although such source owners could in most cases readily accept enforceable limitations restricting the operation to its designed level, EPA believes this administrative requirement for such sources to be unnecessary and burdensome.

On the topic of "physical and operational design," the January 25 memorandum provided a general discussion. In addition, EPA committed to providing technical assistance on the type of inherent physical and operational design features that may be considered acceptable in determining the potential to emit for certain individual small source categories. The EPA is currently conducting category-specific analyses in support of this effort, and hopes as a result of these analyses to generate more general guidance on this issue as well.

The purpose of this memorandum is to address the issue of PTE as it relates specifically to emergency generators. There is a significant level of interest in this source category because there are many thousands of locations for which an emergency generator is the only emitting source. Moreover, based on a review of this source category, there exists a readily identifiable constraint on the operational design of emergency generators. Hence, the EPA believes it would be useful to provide today's guidance before the entire effort is complete.

The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

Guidance for Emergency Generators

For purposes of today's guidance, an "emergency generator" means a generator whose sole function is to provide back-up power when electric power from the local utility is interrupted. The emission source for such generators is typically a gasoline or diesel-fired engine, but can in some cases include a small gas turbine. Emissions consist primarily of carbon monoxide and nitrogen oxides. Other criteria pollutants, and hazardous air pollutants, are also emitted, but at much lower levels. Emissions occur only during emergency situations (i.e., where electric power from the local utility is interrupted), and for a very short time to perform maintenance checks and operator training.

The EPA believes that generators devoted to emergency uses are clearly constrained in their operation, in the sense that, by definition and design, they are used only during periods where electric power from public utilities is unavailable. Two factors

indicate that this constraint is in fact "inherent." First, while the combined period for such power outages during any one year will vary somewhat, an upper bound can be estimated which would never be expected to be exceeded absent extraordinary circumstances. Second, the duration of these outages are entirely beyond the control of the source, and when they do occur (except in the case of a major catastrophe) rarely last more than a day.

For emergency generators, EPA has determined that a reasonable and realistic "worst-case" estimate of the number of hours that power would be expected to be unavailable from the local utility may be considered in identifying the "maximum capacity" of such generators for the purpose of estimating their PTE. Consequently, EPA does not recommend the use of 8760 hours per year (i.e., full-year operation) for calculating the PTE for emergency generators. Instead, EPA recommends that the potential to emit be determined based upon an estimate of the maximum amount of hours the generator could operate, taking into account (1) the number of hours power would be expected to be unavailable and (2) the number of hours for maintenance activities.

The EPA believes that 500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions. Alternative estimates can be made on a case-by-case basis where justified by the source owner or permitting authority (for example, if historical data on local power outages indicate that a larger or smaller number would be appropriate). Using the 500 hour default assumption, EPA has performed a number of calculations for some typically-sized emergency generators. These calculations indicate that these generators, in and of themselves, rarely emit at major source levels. (Of course, there may be unusual circumstances where these calculations would not be representative, for example where many generators are present that could operate simultaneously).

Cautions

Today's guidance is only meant to address emergency generators as described. Specifically, the guidance does not address: (1) peaking units at electric utilities; (2) generators at industrial facilities that typically operate at low rates, but are not confined to emergency purposes; and (3) any standby generator that is used during time periods when power is available from the utility. This guidance is also not intended to discourage permitting authorities from establishing operational limitations in construction permits when such limitations are deemed appropriate or necessary. Additionally, this memorandum is not intended to be used as the basis to rescind any such restrictions already in place.

Distribution/Further Information

The Regional Offices should send this memorandum, including the attachment, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act" - "Title V" - "Policy Guidance Memos". (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachments

cc: Air Branch Chief, Region I-X
Regional Air Counsels, Region I-X
Adan Schwartz (2344)
Tim Smith (MD-12)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

NOV 14 1995

MEMORANDUM

SUBJECT: Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and 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
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

The purpose of this guidance is to address the determination of PTE for grain elevators and other issues for grain handling facilities.

Background

In a memorandum dated January 25, 1995, the Environmental Protection Agency (EPA) addressed a number of issues related to the determination of a source's PTE under section 112 and title V of the Clean Air Act (Act). [Memorandum from John Seitz to EPA Air Directors entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," hereinafter referred to as the "January 25 memorandum"]. One of the issues discussed in the memorandum was the term "maximum capacity of a stationary source to emit under its physical and operational design," which is part of the definition of "potential to emit." The memorandum clarified that

inherent physical limitations and operational design features which restrict the potential emissions of individual emission units, should be taken into account. This clarification was intended to address facilities for which the theoretical use of equipment is much higher than could ever actually occur in practice. For such facilities, if their physical limitations or operational design features are not taken into account, the potential emissions could be overestimated and the source owner could be subject to the Act requirements affecting major sources. Although such source owners could accept enforceable limitations restricting the operation to its designed level, the EPA believes this administrative requirement to be unnecessary and burdensome.

On the topic of "physical and operational design," the January 25 memorandum provided a general discussion. In addition, the EPA committed to providing technical assistance on the type of inherent physical and operational design features that may be considered acceptable in determining the potential to emit for certain individual small source categories. The EPA is currently conducting category-specific analyses in support of this effort, and hopes as a result of these analyses to generate more general guidance on this issue as well. The purpose of this memorandum is to address the issue as it relates specifically to grain elevators, and to provide EPA guidance on other issues related to grain handling facilities.

The policies set forth in this memorandum represent official EPA guidance on this issue and are intended to provide guidance to State regulators on methods that the EPA believes are appropriate for sources whose potential emissions are, as a practical matter, restricted by inherent operational limitations. The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

In addition to today's guidance, there are two additional recent EPA activities that relate to emission calculations for grain elevators and other grain handling facilities. First, the EPA recently issued a policy memorandum entitled "Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V," (Lydia Wegman to Regional Offices, October 16, 1995.) In this memorandum, the EPA recognizes PM-10 as the only regulated form of particulate matter for purposes of determining applicability to title V major source requirements. Second, the EPA is issuing revised emission calculation methods (interim update to AP-42, section 9.9.1, "Grain Elevators and Processes") The combined result of the October 16 memorandum and the revised emission calculation methods is a substantial reduction in the particulate emission estimates from a given grain elevator and grain handling facilities.

Guidance for Grain Elevators

For purposes of today's guidance, a "country grain elevator" means any grain elevator that receives more than 50 percent of its grain from farmers in the immediate vicinity during the harvest season, and a grain terminal is an elevator that receives grain primarily from other elevators.

Grain elevators emit particulate matter, including PM-10, during the receiving, handling, and shipping of grain. The rate of particulate matter emitted is directly proportional to the amount of grain handled by the elevators.

The EPA recognizes that country grain elevators are clearly constrained in their operation, to the extent that they are designed to service, and as a matter of operation only service, a limited geographic area from which a finite amount of grain can be grown and harvested. Moreover, the principal determinant of which given elevator will be used by a farmer is the proximity of the elevator to the harvest. Consequently, a single elevator services essentially the same geographic area from year to year. The EPA believes that this constraint is "inherent" to the operation of the elevator (i.e., operation of the grain elevator is directly linked to a specific and definable harvest area). The grain handling and storage facilities at grain elevators are designed to handle very large amounts of grain in a relatively short period of time (i.e., at harvest). Although the physical capability exists to handle large amounts of grain throughout the year, such a year-round operation is clearly unachievable as a practical matter and does not occur in reality. Although the amount of grain harvested during any 1 year will vary somewhat, the EPA believes that an estimable and reasonable upper bound can be determined which would never be exceeded absent extraordinary circumstances.

For existing country grain elevators, the EPA has determined that a reasonable and realistic "upper-limit" estimate of the number of bushels of grain projected to be delivered to the elevator may be considered in identifying the "maximum capacity" of such elevators for the purpose of estimating their PTE. Consequently, the EPA does not recommend basing the potential to emit calculation for existing country grain elevators on a throughput estimate based upon year-round operation of the elevator at its maximum rate of operation.

Instead, the EPA recommends that the PTE be determined based upon a more realistic estimate of the maximum amount of grain that could be received during a record crop year in the geographic area served by the elevator. The EPA believes that the highest amount of grain received during the previous 5 years, multiplied times an adjustment factor of 1.2, will constitute a

realistic upper bound on the amount of grain a country elevator could receive. The adjustment factor of 1.2 is designed to take into account additional considerations that might affect the maximum harvest including: (1) the possibility that the number of acres harvested in the local area could increase, (for example, if an increased percentage of acres in the growing region became available for planting because of changes in government policy); and (2) increases in crop yields.

The EPA expects that there may be rare cases where the future grain receipts in a given year could exceed the 1.2 times the historical production figure. Where this is the case, the maximum receipt estimate should be recalculated.

> Example: The maximum amount of grain received during the previous 5 years for a given elevator is 2 million bushels. Consequently, the estimate of maximum receipt, to be used for purposes of determining the facility's potential to emit, is 2 x 1.2, or 2.4 million bushels. In some future year, 2.6 million bushels are received. At this point, the maximum receipt estimate becomes 2.6 x 1.2, or 3.1 million bushels.

The EPA believes that this guidance, in combination with the previously mentioned updates to emission calculation methods, will result in few, if any, country grain elevators exceeding the major source threshold for PM-10.

Permitting of Nonmajor Sources

In response to recent questions, the EPA wishes to clarify the requirements of the title V program for nonmajor source grain elevators subject to section 111 or 112 standards. This issue is addressed in 40 CFR part 70, paragraph 70.3(b)(1), which allows States to exempt nonmajor sources from title V permitting until such time as the EPA completes a rulemaking to determine how the program should be structured in the future for nonmajor sources.

For grain elevators over a certain size, there is an existing new source performance standard (i.e., a section 111 standard) that was promulgated during the late 1970s. This same standard also applies to additional agriculturally-related facilities such as flour mills, corn mills (human consumption), and rice mills. Some sources covered by this standard may have potential emissions less than the major source threshold. For these nonmajor sources, as indicated in section 70.3(b)(1), the EPA has granted a temporary exemption from title V permitting. As noted, this temporary exemption from title V permitting is set to expire when the EPA completes a further rulemaking addressing permitting of nonmajor sources. However, it is the EPA's intent that this rulemaking or a separate rulemaking will establish a

permanent exemption for grain elevators, feed mills, and other grain handling facilities that are nonmajor sources.

There are currently no applicable section 112 standards for the grain and feed industry. As indicated by paragraph 70.2(b)(2), the EPA will, for any future section 111 or 112 standards that may apply, determine whether to exempt any or all nonmajor sources from the requirement to obtain a title V permit at the time the standard is promulgated.

Facilities with Low Actual Emissions

The EPA also believes it useful to reiterate its policy guidance with respect to sources with low annual rates of actual emissions. In the January 25 memorandum, the EPA announced a 2-year transition policy for plant sites emitting less than 50 percent of the major source threshold. Under this transition policy, sources emitting less than this amount, and keeping adequate records, are not required to be treated by States as major sources for purposes of determining applicability of title V and section 112 requirements. The transition period in the memorandum expires in January 1997.

The EPA intends to promulgate rulemaking amendments that would extend permanent relief to low-emitting sources, excluding such sources from being classified as "major sources" for purposes of title V permitting. (The exact cutoff for what constitutes a low-emitting source would be determined in the rulemaking process). Such amendments are scheduled for completion before the end of the 2-year transition period. (If the amendments are not promulgated by January 1997, the transition period will be extended for the facilities addressed in this document until the above-mentioned amendments are finalized).

The EPA believes that these provisions for low-emitting sources will ease the regulatory burden for grain elevators, feed mills, and other agriculturally-related facilities. Using the recently adopted (November 1995) interim emission factors for PM-10, even on an uncontrolled basis, the EPA has determined that grain elevators with an actual throughput less than the values listed in Attachment 1 will not exceed 50 percent of the major source threshold. So long as adequate records of annual throughput are kept, sources handling less than those levels are considered by the EPA to be emitting less than the 50 percent cutoff and can be exempted from title V. Because these facilities are often well controlled, many grain terminals with greater throughputs will not be subject to title V permitting. In addition, preliminary calculations indicate that only the largest of feed mills are likely to exceed this cutoff.

Consideration of Control Measures

The effect of control devices and measures in grain handling facilities can be taken into account in determining whether a source can be considered a "low-emitting source" as described above, so long as adequate records are kept documenting the proper operation and maintenance of the control devices and measures.

The EPA and the grain industry are working to develop estimates of the effectiveness of oil addition as a control measure. The results of this effort should be available by later this year or early next year. Interim guidance on the effectiveness of oil addition is available in the above-described revisions to section 9.9.1 of AP-42. Consistent with the provisions affecting other types of control devices or measures, the effectiveness of oil addition can be taken into account in determining whether actual emissions are below the cutoff for "low-emitting" facilities as described above.

For sources whose actual emissions exceed the cutoff described above, consistent with the EPA's general PTE policy, the effect of control measures (including oil addition) can be taken into account where those control devices and measures are subject to enforceable limits or are inherent to the operation of the facility. [Control measures that are "inherent" are those which are always being operated and maintained for reasons other than community air quality protection. Examples of inherent control measures would include (a) product collection devices for which the value of the product collected greatly exceeds the cost of the collection device, and (b) devices for which the primary purpose is to improve product quality control, to recover product, or to enhance production operating efficiency (for example, product recovery cyclones associated with operations such as pellet cooling at feed mills).]

There are a number of grain elevators that have "closed loop" systems in which conveyors are completely enclosed essentially from the grain unloading point to the point at which grain is deposited to the bin. Where this is the case, some agencies (for example, the State of Michigan) have made adjustments in the emission estimate to take this into account. The EPA agrees that such adjustments are appropriate, particularly in estimating emissions from the "headhouse" or "internal" portions of the emission factors. Further, in the case of feed mills, there are certain operations which can be totally enclosed. Where this is the case, the emission calculations should take this into account.

Cautions

This guidance is not intended to replace the establishment of operational limitations in permits to construct or operate when such limitations are deemed appropriate or necessary, such as the establishment of PTE limits in a minor source preconstruction permit for sources not yet in operation. (For such sources, there may not be a historical data base on crop production). Additionally, this memorandum is not intended to be used as the basis to rescind any such restrictions already in place.

This guidance should not be interpreted as having any effect on whether new source performance standards apply to a given elevator. The guidance is not intended to prevent any control agency from imposing requirements designed to provide for attainment of the national ambient air quality standards.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachments

cc: Chief, Air Branch, Regions I-X

Grain Throughput associated with Uncontrolled PM-10 emissions of 50 tons/yr

Type of shipping/receiving	Grain	Total throughput (bushels)
Truck or rail receiving/truck or rail shipping	Wheat Corn/soybeans Milo (sorghum)	32 million 14 million 20 million
Truck or rail receiving/barge shipping	Wheat Corn/soybeans Milo (sorghum)	24 million 10 million 15 million
Barge receiving/ship shipping	Wheat Corn/soybeans Milo (sorghum)	10 million 4.0 million 6.1 million
Truck or rail receiving/ship shipping	Wheat Corn/soybeans Milo (sorghum)	17 million 7.1 million 10 million

Notes:

1. This table indicates, based upon the EPA's recommended interim emission factors, the throughput associated with 50 tons per year of uncontrolled PM-10 emissions, which is 50 percent of the major source threshold for PM-10. (For a small number of geographic locations designated as serious PM-10 nonattainment areas, the major source threshold is 70 tons per year. For any elevators located in such areas, the above number should be multiplied times 0.7).

2. The estimates take into account: (a) receiving, (b) internal grain handling emissions, (c) bin vents, and (d) shipping. These are the sources that are generally present at a given terminal. If there are other significant sources of PM-10 at a given terminal, these would need to be considered.

3. Calculations assume density of wheat = 60 lb/bushel. Density of corn, soybeans, milo (sorghum) = 56 lb/bushel.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 22 1996

MEMORANDUM

SUBJECT: Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)
Office of Air and Radiation

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241A)
Office of Enforcement and Compliance Assurance

TO: Regional Office Addressees (see below):

The purpose of this memorandum is to notify you that the Agency is today releasing detailed guidance (referred to below as the "Interim Policy") clarifying the immediate impacts of two recent decisions by the U.S. Court of Appeals for the D.C. Circuit regarding EPA regulations requiring federal enforceability of limitations on a source's potential to emit ("PTE") under certain CAA programs. This cover memorandum briefly summarizes the court decisions, and briefly summarizes the immediate impacts of the decisions on current regulations. A more detailed discussion of the impacts of the two court decisions is attached. The policy will remain in place until January 1997, but may be extended if necessary to coincide with the promulgation of revised regulations.

The Court Decisions

In National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. 1995), the court addressed hazardous air pollutant programs under section 112. The court found that EPA had not adequately explained why only federally enforceable measures should be considered as limits on a source's potential to emit. Accordingly, the court remanded the section 112 General Provisions regulation to EPA for further proceedings. EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. The court did not vacate the section 112 regulations, that is, the court did not declare the regulations null and void. The regulations remain in effect pending completion of new rulemaking.

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In Chemical Manufacturers Ass'n v. EPA, No. 89-1514 (D.C. Cir. Sept. 15, 1995), the court, in light of National Mining, remanded the PTE definition in the PSD and NSR regulations to EPA. The court also vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

Summary of Immediate Impacts of the Court Decisions

EPA plans to propose rulemaking amendments in spring 1996 that would address the federal enforceability issue as it relates to section 112, title V, and Prevention of Significant Deterioration & New Source Review ("PSD/NSR") regulations. Pending this rulemaking, the immediate impacts are as follows:

Effects on Section 112. Because the court did not vacate the rule, the current part 63 regulations, requiring federal enforceability, remain in effect.

Effects on title V. Although neither court case addressed the title V regulations, industry challenges to the part 70 requirements are pending. Because the federal enforceability provision of the title V regulations are closely related to the regulations addressed in the two decided cases, EPA will ask the court to leave part 70 in place as the rulemaking amendments are being developed.

Effects on PSD/NSR. Because the court vacated the rules, the requirements in the nationwide rules for PSD and major source NSR concerning federal enforceability are not in effect. In many cases, however, individual State rules implementing these programs have been individually approved in the State Implementation Plan (SIP). The court did not vacate any requirements for federal enforceability in these individual State rules, and these requirements remain in place. As discussed in detail in the Interim Policy, the immediate practical impacts on the PSD/NSR programs are not substantial for newly constructed major sources. Greater impacts may exist for existing major sources seeking to avoid review by demonstrating a net emissions decrease.

Effects on January 25, 1995 Transition Policy. The transition policy remains in effect with one change. For sources emitting more than 50% of the major source threshold, and holding State-enforceable limits, EPA is no longer requiring that the source submit a certification to EPA.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718, Adan Schwartz of the Office of General Counsel at 202-260-7632, or Julie Domike of the Office of Enforcement and Compliance Assurance at 202-564-6577. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and 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
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Regional Counsels, Regions I-X

Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

EPA INTERIM POLICY ON FEDERAL ENFORCEABILITY REQUIREMENT FOR LIMITATIONS ON POTENTIAL TO EMIT
January 1996

This document provides guidance clarifying the immediate impacts of recent court decisions related to federal enforceability of limitations on a source's potential to emit ("PTE"). In brief, most current regulatory requirements and policies regarding PTE, including the interim policy recognizing state-enforceable limits under section 112 and Title V in some circumstances, remain in effect while EPA conducts expedited rulemaking to address these issues in detail. However, at present, certain netting transactions involving PTE limits under new source review programs may now take place without federal enforceability. Today's guidance will be superseded upon completion of the new rulemaking.

Background

Several important Clean Air Act programs apply to only major sources, i.e., those that "emit or have the potential to emit" amounts exceeding major source thresholds listed in the Act. The EPA has promulgated regulations defining the term "potential to emit" for most of these programs. In particular, five sets of regulations are in place implementing the major source prevention of significant deterioration (PSD) and nonattainment area new source review (NSR) permitting programs (40 CFR 51.166, 40 CFR 52.21, 40 CFR 51.165, Appendix S of 40 CFR Part 51, and 40 CFR 52.24). Regulations governing approvability of state operating permit programs under Title V of the CAA are contained in 40 CFR Part 70, and EPA has proposed regulations implementing a federal operating permits program that are to be promulgated at 40 CFR Part 71. Regulations implementing the requirements of section 112 of the Act related to major sources of hazardous air pollutants are contained in 40 CFR Part 63, subpart A.

For each of the above Clean Air Act programs, the EPA regulations provide that "controls" (i.e., both pollution control equipment and operational restrictions) that limit a source's maximum capacity to emit a pollutant may be considered in determining its potential to emit. Historically, large numbers of new or modified sources that otherwise would be subject to PSD and NSR permitting requirements have limited their PTE in order to obtain "synthetic minor" status and thereby avoid major source requirements. With the advent of operating permit programs under Title V and the MACT program under section 112, many sources that otherwise would be subject to these new requirements under the Clean Air Act Amendments of 1990 also have obtained, or plan to obtain, PTE limits to avoid coverage. For each of these programs, EPA regulations have required that PTE limits be "federally enforceable" in order to be considered in determining PTE.

These federal enforceability requirements were the subject of two recent decisions of the D.C. Circuit Court of Appeals. The first decision, National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. July 21, 1995), dealt with the potential to emit definition under the hazardous air pollutant programs promulgated pursuant to CAA section 112. In this decision, the Court implicitly accepted EPA's argument that only "effective" state-issued controls should be cognizable in limiting potential to emit. In addition, the court did not question the validity of current federally enforceable mechanisms in limiting PTE. However, the court found that EPA had not adequately explained why only federally enforceable measures should be considered in assessing the effectiveness of state-issued controls. Accordingly, the Court remanded the section 112 General Provisions regulation to EPA for further proceedings. Thus, EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. The court did not vacate the section 112 regulations, and they remain in effect pending completion of EPA rulemaking proceedings in response to the court's remand.

The second decision, Chemical Manufacturers Ass'n v. EPA, No. 89-1514 (D.C. Cir. Sept. 15, 1995), dealt with the potential to emit definition in the PSD and NSR programs. Specifically, this case challenged the June 1989 rulemaking in which the EPA reaffirmed the requirement for federal enforceability of PTE limits taken to avoid major source permitting requirements in these programs. In a briefly worded judgment, the court, in light of National Mining, remanded the PSD and NSR regulations to EPA. In addition, in contrast to its disposition of the section 112 regulations in National Mining, the court in Chemical Manufacturers vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

In a third set of cases, industry challenges to the federal enforceability requirements in Part 70 are pending before the D.C. Circuit. The Title V cases have not been briefed. However, since the federal enforceability provisions of these Title V regulations are closely related to the regulations addressed in the two decided cases, EPA plans to ask the court to remand the regulations to EPA for further rulemaking, and to leave Part 70 in place during the new rulemaking.

Plans for Rulemaking Amendments

EPA plans to hold discussions with stakeholders and propose rulemaking amendments by spring 1996, and to issue final rules by spring 1997, that would address the court decisions impacting regulations promulgated pursuant to section 112 and the PSD/NSR regulations. At the same time, EPA will propose a parallel approach to cognizable PTE limits for major sources subject to

title V. EPA currently plans to address the following options, after discussions with stakeholders:

(a) An approach that would recognize "effective" State-enforceable limits as an alternative to federally enforceable limits on a source's potential to emit. Under this option, a source whose maximum capacity to emit without pollution controls or operational limitations exceeds relevant major source thresholds may take a State or local limit on its potential to emit. In such circumstances, the source must be able to demonstrate that the State-enforceable limits are (1) enforceable as a practical matter, and (2) being regularly complied with by the facility.

(b) An approach under which the EPA would continue to require federal enforceability of limits on a source's potential to emit. Under this approach, in response to specific issues raised by the court in National Mining, EPA would present further explanation regarding why the federal enforceability requirement promotes effective controls. Under this approach, EPA would propose simplifying changes to the administrative provisions of the current federal enforceability regulations.

The remainder of this guidance memorandum addresses the immediate impacts of the court decisions on each of the three programs, in light of the upcoming rulemaking.

Effects on PSD/NSR

EPA interprets the court's decision to vacate the PSD/NSR federal enforceability requirement in the Chemical Manufacturers case as causing an immediate change in how EPA regulations should be read, although EPA expects that the effect of this change will be limited. Specifically, provisions of the definitions of "potential to emit" and related definitions requiring that physical or operational changes or limitations be "federally enforceable" to be taken into account in determining PSD/NSR applicability, the term "federally enforceable" should now be read to mean "federally enforceable **or legally and practicably enforceable by a state or local air pollution control agency.**"[1]

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[1]Both National Mining and Chemical Manufacturers directly addressed only the definition of potential to emit, and not related definitions that also employ the federal enforceability requirement, in particular, those related to netting. (See, e.g., 40 CFR § 52.21(b)(3)(vi)(b) providing that an emissions decrease is creditable only if it is "federally enforceable.") The court's concerns regarding the adequacy of EPA's rationale, however, appear to extend to these netting provisions;

For the reasons discussed below, however, the practical effects of the vacatur will be limited during the period prior to completion of new EPA rulemaking on this issue. During this interim period, federal enforceability is still required to create "synthetic minor" new and modified sources in most circumstances pending completion of EPA's rulemaking.

First, EPA interprets the order vacating certain provisions of EPA regulations as not affecting the provisions of any current SIP, or of any permit issued under any current SIP. Thus, previously issued federally enforceable permits, such as permits issued under federally enforceable state operating permit programs under Title I ("FESOPPs") remain in effect. Likewise, EPA-approved state PSD and NSR SIP rules requiring that all pollution controls or operational restrictions limiting potential to emit be federally enforceable remain in place, even though such provisions may have been based on the now-vacated terms of EPA regulations.[2]

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consequently, EPA interprets the vacatur as extending to them as well. Conversely, EPA reads the vacatur as not extending to aspects of the PTE definition other than the federal enforceability provision. Such other aspects (e.g., determining a source's "maximum capacity" to emit in the absence of controls) were not at issue in the litigation and not addressed by the court decisions. In addition, EPA interprets Chemical Manufacturers as not addressing the regulatory requirements for federal enforceability of offsets used to comply with NSR requirements. CAA § 173(a) expressly requires that any emissions reductions required as a precondition to the issuance of a nonattainment NSR permit to be "federally enforceable" before the permit may be issued. This requirement is not affected by the court decisions.

[2]The situation is somewhat different in the several states lacking approved PSD programs, which are governed instead by the federal PSD program at 40 CFR § 52.21. (In most instances, these states have been delegated authority to issue PSD permits under the federal program pursuant to § 52.21(u).) Since these states do not have an EPA-approved PSD program, their SIPs presumably also lack state rules containing a blanket requirement that new or modified sources use only federally enforceable limits on PTE when seeking synthetic minor status to avoid PSD. Rather, sources in these states have been subject to the federal enforceability requirements of § 52.21. As noted above, Chemical Manufacturers vacated the requirements in § 52.21 that physical or operational changes be "federally enforceable" to be taken into account in determining the applicability of PSD to a proposed new source or modification. Accordingly, in states governed by § 52.21, a limit that is either "federally

Second, a new or modified source that seeks to lawfully avoid compliance with the "major" source requirements of either PSD or nonattainment NSR by limiting its potential to emit to achieve synthetic minor status must still obtain a general or "minor" NSR preconstruction permit under section 110(a)(2)(C) of the Act and 40 C.F.R. § 51.160-164. Every SIP contains a minor NSR program that applies generally to new or modified sources of air pollutants, without regard to whether those sources are "major." Permits under such programs are, like all other SIP measures, federally enforceable. See CAA section 113(b)(1); 40 CFR § 52.23.[3] The requirement under section 110(a)(2)(C) to obtain a federally enforceable minor NSR permit was not at issue in the Chemical Manufacturers case, and is unaffected by the court's ruling.

As noted above, the court's action does not affect FESOPPs that many states have adopted as an additional mechanism for avoiding PSD/NSR or for creating an emissions reduction credit that may be tradeable to another source. Permits issued under such programs continue to be valid for purposes of limiting PTE. States are free to submit SIP revisions to remove such provisions in light of the vacatur, and to substitute mechanisms that are legally and practicably enforceable by the state for limiting potential to emit in some circumstances under the PSD/NSR program. However, we expect few states to do so pending the outcome of new EPA rulemaking on the broader federal enforceability issue.

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enforceable or legally and practicably enforceable by a state or local air pollution control agency" may now be used in determining PSD applicability in some circumstances. The effect of the vacatur in these states is limited, however, because as discussed below, new and modified sources in these states are still subject to the requirement to obtain federally enforceable minor source permits.

[3]Consider, for example, an existing source in a moderate ozone nonattainment area that plans to add a new emissions unit that would have the potential to emit 100 tons per year ("TPY") of VOC if uncontrolled, and would therefore be considered a major modification subject to major NSR requirements, including a requirement to install pollution controls representing LAER that would reduce emissions in this instance by 90%. The source may instead seek to avoid major NSR by installing cheaper controls that reduce emissions by 61% and thereby limit the emissions increase to 39 TPY -- just below the "major" modification threshold. Such a source would still need to obtain a minor NSR permit to construct the new unit, and that permit would be federally enforceable.

Likewise, states conceivably might now seek to reduce the scope of SIP-approved minor NSR programs where they are presently broader than minimum federal requirements (e.g., to no longer cover changes at existing emissions units that reduce emissions to create a netting credit or tradeable emission reduction credit), and to substitute state-enforceable mechanisms. Here also, however, EPA does not expect states to seek such changes pending the outcome of EPA rulemaking. In addition, regarding the minimum scope of minor NSR programs, section 110(a)(2)(C) provides that state minor NSR programs must regulate all new or modified sources "as necessary" to insure consistency with air quality planning goals. Given the central role of new and modified synthetic minor sources in the overall PSD/NSR regulatory scheme, and the adverse environmental consequences if controls were not effective in limiting PTE, it is unlikely that states would have the legal ability to exclude from such programs transactions that are intrinsic to the avoidance of major NSR permitting requirements.

The principal immediate impact of the vacatur of the PSD/NSR federal enforceability regulations likely will occur in cases involving "netting" exercises at existing sources, where a source seeks to internally offset an emissions increase at a new or modified emissions unit by installing pollution controls or accepting operational limitations at <u>another</u> unit within the plant. For the reasons discussed above, in such cases the new or modified unit would still need to obtain a federally enforceable minor NSR permit. In contrast, the vacatur ordered by the court may allow the unit that is limiting its emissions to rely in some circumstances on controls that are legally and practicably enforceable by the state.[4] Note, however, that under the terms of many state minor NSR programs, the unit undergoing an emissions reduction would still need to be included in the minor NSR permit. Also, if the state's SIP has a general requirement that PTE limits be federally enforceable, the unit reducing

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[4]Consider, for example, an existing source like the one addressed above in Footnote 3, that also plans to install a new unit that would have the potential to emit 100 tons per year of VOC per year if uncontrolled. In contrast to the earlier example, however, this source plans to avoid major NSR not by controlling the new unit, but instead by installing controls at another emissions unit at the plant whose baseline emissions are 100 TPY that will reduce actual emissions by 61 TPY. The overall result of this netting transaction is the same as in the earlier example: a net emissions increase of 39 TPY at the plant. The new unit would still need to obtain a minor NSR permit, and that permit would still be federally enforceable. In light of the vacatur in <u>Chemical Manufacturers</u>, however, the existing unit that is adding controls now may be able to limit its PTE using a state-enforceable permit.

emissions would still need a federally enforceable limit. Such programs would not be affected by the court's ruling. In sum, the precise impact of the vacatur on PSD/NSR applicability in any state can be definitively established only by reviewing the provisions of a particular SIP.

Effects on Section 112 and Title V

The National Mining decision did not vacate the current definition of a major source under section 112 program in the General Provisions to Part 63, and neither of the court decisions addressed the definition of a major source for the title V program in 40 CFR part 70. Both of these current definitions, therefore, remain in effect. As discussed above, however, these regulations will be affected by the rulemaking EPA is conducting in response to the court decisions.

EPA today reiterates that independent from the decision in National Mining, current EPA policy already recognizes State-enforceable PTE limits under section 112 and Title V in many circumstances under a transition policy intended to provide for orderly implementation of these new programs under the Clean Air Act Amendments of 1990. This policy is set forth in a memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (January 25, 1995). The transition policy is summarized below; as noted, EPA is now making one significant change in that policy in light of National Mining.

In recognition of the absence in some states of suitable federally enforceable mechanisms to limit PTE applicable to sources that might otherwise be subject to section 112 or Title V, EPA's policy provides for the consideration of State-enforceable limits as a gap-filling measure during a transition period that extends until January 1997.[5] Under this policy, for the 2-year transition period, restrictions contained in State permits issued to sources that actually emit more than 50 percent, but less than 100 percent, of a relevant major source threshold are treated by EPA as acceptable limits on potential to emit, provided: (a) the permit and the restriction in particular are enforceable as a practical matter; (b) the source owner submits a written certification to EPA accepting EPA and citizen enforcement. In light of National Mining, EPA believes that the certification requirement is no longer appropriate as part of this policy. Accordingly, **EPA hereby amends the January 1995 transition policy by deleting the certification requirement.**

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[5]Since PSD and nonattainment NSR are mature programs, minor NSR permits to limit PTE were available in all states well prior to enactment of the Clean Air Act Amendments of 1990. Hence, EPA's transition policy does not extend to those programs.

In addition, under the transition policy, sources with consistently low levels of actual emissions relative to major source thresholds can avoid major source requirements even absent any permit or other enforceable limit on PTE. Specifically, the policy provides that sources which maintain their emissions at levels that do not exceed 50 percent of any applicable major source threshold are not treated as major sources and do not need a permit to limit PTE, so long as they maintain adequate records to demonstrate that the 50 percent level is not exceeded.

Under the terms of EPA's transition policy, the transition period is to end in January 1997. In addition, completion of EPA's rulemaking in response to the recent court decisions, which EPA anticipates will occur by early 1997, may render the transition policy unnecessary after that time. However, in conjunction with the rulemaking, EPA will consider whether it is appropriate to extend the transition period beyond January 1997.

A.7.11-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 3 1 1996

OFFICE OF
AIR AND RADIATION

Dear Members of the Subcommittee on Permits, New Source Review and Toxics Integration:

As many of you know, EPA has been carefully considering how to respond to recent court decisions regarding federal enforceability of potential to emit limits. These decisions have created a need for the Agency to clarify through rulemaking what constitutes an "effective" limit on a source's potential to emit air pollutants. We wish to enlist your help in this process. The Agency recognizes the need to move expeditiously to resolve any uncertainties that may have been created regarding the applicability of many CAA requirements.

At this stage, before drafting the rulemaking proposal package, we believe it is important to solicit the views of subcommittee members on the issues and options that should be considered. Staff have drafted the attached discussion paper to aid in this process.

The paper is intended to lay out the legal and policy issues that EPA will address in response to the court decisions. The paper discusses components that may be needed for a limit to be "effective" in ensuring that a source does not emit major amounts. The Agency believes that defining what makes a limit "effective" is our central task in the wake of the National Mining Association decision. In addition, the paper describes options for addressing the issues raised.

As part of EPA's response to the National Mining Association and Chemical Manufacturers' Association decisions, and as part of its continuing effort to reconsider its regulations and streamline them where possible, the Agency now is re-examining all aspects of EPA's historical policy on potential to emit limits. Accordingly, EPA is setting forth for serious discussion and consideration an option that would recognize "effective" state-enforceable requirements as limiting a source's potential to emit. The Agency also is presenting an option that would retain federal enforceability as a necessary condition of effective limits, but streamline administrative requirements for creating such limits to address concerns raised in the past.

The Agency plans to issue a proposed rule that includes both these options, as well as proposing ways to address other issues that influence whether limits are effective. Taking comment on these options will ensure that all stakeholders have an opportunity to express their views on implications of different options for the regulated community, states and the public. The Agency's overarching goal is to establish a system that avoids unreasonable burdens on industry or states, and ensures that major sources of air pollution comply with Clean Air Act requirements that protect public health.

Discussion of these issues is planned for the next meeting of the subcommittee, which we anticipate will be scheduled for March. We look forward to hearing your thoughts and recommendations at the meeting. If any members wish to make comments in writing, we of course will be happy to review them.

Sincerely yours,

for Steven A. Herman
Assistant Administrator
for Enforcement and
Compliance Assurance

Sincerely yours,

Mary D. Nichols
Assistant Administrator
for Air and Radiation

Attachment:

A.7.11-3

"Effective" Limits on Potential to Emit: Issues and Options

January 31, 1996

Note to reviewers

This paper presents a discussion of the issues that EPA intends to address in response to recent court decisions by the D.C. Circuit on the subject of potential to emit limitations. This paper is intended as the first step in the development of a formal rulemaking proposal, and is intended to list and discuss various options for regulatory amendments that are available to the EPA as a result of these court decisions.

To aid the stakeholder discussion process, the paper presents options for addressing the issues raised in the court decisions. On the issue of federal enforceability, two distinct approaches are presented with specifics on how these two approaches could be implemented.

It is hoped that the critical review of the options will help identify the most important issues to be resolved in promulgating rulemaking amendments on this issue. Additionally, EPA hopes that the review will serve to identify areas of consensus among stakeholders on the importance of issues and the feasibility of solutions, particularly the ones EPA is offering in this document. The EPA would appreciate comments from stakeholders on whether there are any additional options and approaches, beyond those addressed in this paper, that should be discussed in the rulemaking process.

Because the primary purpose of the paper is to identify options, the paper presents only a minimal discussion of the rationale for each option. A more detailed rationale will be set forth in the preamble to the proposed rule.

I. Framing the issues: The NMA and CMA decisions and their implications

Several provisions of the Clean Air Act (CAA) require that "major" sources be regulated more stringently than sources that are non-major. A "major" source is defined for purposes of section 112, title V, and the title I new source review (NSR) and prevention of significant deterioration (PSD) programs as one that either "emits or has the potential to emit" above a specified amount. Because sources that are major are generally subject to more stringent controls, the Act creates an economic incentive for many sources to limit their potential to emit so as

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to avoid those requirements.[1] The integrity of these limits is important to ensure that major sources comply with Clean Air Act emission control requirements, and that the reductions in air pollution expected from these requirements are actually achieved.

EPA regulations governing NSR and PSD programs have, since the 1970s, required that limitations[2] on potential to emit (PTE) be federally enforceable before they can be recognized under the Clean Air Act. Following the 1990 amendments to the Act, EPA promulgated regulations implementing section 112 and title V of the Act, both of which mirrored the NSR/PSD regulations in this respect. On July 21, 1995, the D.C. Circuit Court of Appeals issued a decision in National Mining Association v. EPA, in which it held that EPA had not adequately justified the requirement in the section 112 regulations that limits on PTE must be federally enforceable. The Court noted that, while EPA was correct in requiring PTE limits to be "effective," it had not adequately explained how federal enforceability furthered effectiveness. On September 15, 1995, the D.C. Circuit issued a summary decision in Chemical Manufacturers Association v. EPA, vacating and remanding relevant portions of the NSR/PSD rules in light of the NMA decision.

The NMA case makes clear that EPA has the authority and the obligation to ensure that only those limits that are "effective" in limiting emissions are considered in determining PTE. However, the meaning of the term "effective," as the Court used it, is not self-evident. EPA believes that the primary purpose of this rulemaking should be to incorporate the notion of "effectiveness" into the regulatory scheme in a manner that provides clear guidance to States and the regulated community.

EPA's overarching goal in conducting this rulemaking is to establish a system that provides administrative flexibility and avoids unnecessary paperwork while ensuring the effectiveness of limits on PTE that are used to avoid major source requirements under the Act. This rulemaking presents an opportunity to re-examine EPA's historical policy on PTE in its totality, to carry

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[1]Tens of thousands of small emitters lack the potential to emit major amounts even in the absence of controls. It is important to note that under the Clean Air Act these sources do not need to obtain a permit or other legal limit to avoid major source requirements. Therefore, the issues discussed in this paper are not relevant to these sources.

[2]For simplicity, this paper uses the terms "limit" and "limitation" to refer to both operational restrictions such as limits on hours of operation or throughput and to emissions control devices. Also, references to States apply equally to local air pollution control districts.

forward those elements of it that still make sense, and to explore innovative ideas for achieving this goal.

This rulemaking proposal will include two fundamental alternatives on the issue of federal enforceability. The first approach would recognize "effective" State-enforceable requirements as limiting a source's potential to emit. The second would retain federal enforceability as a necessary condition of effective limits, but take comment on options for streamlining administrative requirements for creation of federally enforceable limits.

Although the federal enforceability issue is rightly a focus of attention, EPA believes it is critical to recognize that the "effectiveness" of limits includes considerations other than who may enforce them. The requirement that limits on PTE be enforceable by EPA and citizens under the Act has historically been just one aspect of EPA's policy on PTE.[3] Effectiveness of limits is a multi-faceted concept that can be broken down into component parts.

Three overarching considerations govern the "effectiveness" of PTE limits:

- Enforceability as a practical matter. To be "effective," limitations must be written so that it is possible to verify compliance and to document violations when enforcement action is necessary. Therefore, a key issue is how to define minimum criteria that limits must meet to be "enforceable as a practical matter." A related question is whether procedural safeguards are necessary to ensure those criteria are met.

- Compliance incentive effectiveness. EPA believes that a limit cannot be deemed effective if there is insufficient

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[3]The term "federally enforceable" historically has been used in two ways -- first, to refer narrowly to the authority of EPA and citizens to bring suit for a violation; and, second, to refer to the collective set of elements that the Agency believed contribute to effectiveness of limits (e.g., practical enforceability of limits, approval of state programs as meeting certain criteria, notice of proposed limits to the public and EPA, enforceability in federal court by EPA and citizens). Most of these other elements are separable from enforceability by EPA and citizens, and are treated separately in this paper.

incentive to comply with it.[4] The "effectiveness" of a limit, therefore, depends in part upon the strength of the incentive it provides for a source to comply -- which in turn is tied to the probability of an enforcement action in the event of a violation. The federal enforceability issue is related to this consideration.

- State program effectiveness. Whether the first two aspects of effectiveness are achieved is influenced by the effectiveness of a State program for issuing and enforcing PTE limits. The nature of a State's program affects whether PTE limits are typically issued in a form that is practically enforceable, and whether sources have substantial incentives to comply with their limits. Relevant factors include the State's permitting requirements and program "infrastructure," including the adequacy of its enforcement authority and the level of resources available. In question here is whether a State *program* should have to meet certain criteria in order for the limits it creates to be considered effective, and whether procedures to assure *program* effectiveness should be required.

This paper is structured around the three considerations listed above. Because a key question in the litigation was whether limits need be federally enforceable to be effective, this paper begins by discussing the effectiveness of limits in encouraging sources to comply.

II. Effectiveness of limits: Strength of compliance incentive

The EPA believes that, in order to be effective, a limit must carry with it a credible expectation of enforcement. This aspect of effectiveness, referred to here as "compliance incentive effectiveness," is not revealed by an examination of the PTE limit itself and cannot be definitively evaluated through an up-front evaluation of a State rule or program. Rather, compliance incentive effectiveness is an ongoing consideration related to the strength of a State's enforcement program.

A central question arising from the court decisions is whether sufficient compliance incentives exist if EPA and citizens cannot directly enforce PTE limits in federal court in

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[4]EPA assumes that a limit on potential to emit, in order to be cognizable, must be legally enforceable by an appropriate governmental entity. Though some have made the suggestion that even voluntary limitations should be recognized, EPA does not believe that calculation of a source's potential to emit in the future should take into account pollution control measures that can be freely disregarded.

cases where a State's enforcement program fails to secure compliance with PTE limits. The conclusion that compliance incentive effectiveness is substantially improved through the enforcement authority of EPA and citizens was historically the basis for the requirement that limits on PTE be enforceable by EPA and citizens under the Act.

In light of the NMA and CMA decisions, EPA intends as part of the PTE rulemaking to propose the two options below as ways to ensure compliance effectiveness.

Under Approach 1, *State or locally enforceable limits*, EPA would give formal recognition to effective State limits, so long as the source owner and operator assume the responsibility for demonstrating that the limits are effective and that the source is complying with these limits. Under this approach, if a source failed to comply regularly with its State permit, EPA and citizens could not sue to enforce the permit, but the source would be in violation of major source requirements of the Clean Air Act.[5]

Under Approach 2, *Streamlined federal enforceability*, the EPA would substantially reduce the administrative objections that have been raised regarding the process currently required for limits to be recognized as federally enforceable. The Agency would consider changes that would enable sources to obtain relatively quickly and easily limits that are enforceable by EPA and citizens.

Approach 1: State or locally enforceable limits

1. Description of Approach

EPA would promulgate rule amendments that would recognize limitations that are enforceable by State and local air quality agencies as adequate to restrict a source's potential to emit, as long as the limits are enforceable as a practical matter. Under this approach, EPA and citizens could bring legal action in federal court alleging violations of the major source requirements of the Act in cases when a source fails to obtain or comply with State or local permits that are actually effective in restricting the source's PTE. Under this approach neither EPA

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[5]EPA will consider proposing as part of Approach 1 several additional components described later in this paper. For example, State and local programs could be allowed to issue PTE limits without the program undergoing up-front EPA review. EPA would take comment on what requirements for public participation or notice to EPA, if any, may be appropriate for limits that are not federally enforceable.

nor citizens would have authority under the Clean Air Act to enforce directly the terms of the State or local permit.

In such an enforcement action, EPA or citizens would allege that a source is in violation of the Clean Air Act in that 1) the source would be a major source in absence of any limits on the source's PTE, 2) there are no effective PTE limits in place, or the source has failed to comply with limits that would be effective if complied with, and 3) the source has failed to comply with major source requirements.

In the case of a source which has State or local PTE limits that are not federally enforceable, the regulatory amendments would allocate the burden of proof to the source owner to demonstrate that 1) the source has such State or local limits, 2) that the limits meet EPA's definition of "enforceable as a practical matter," and 3) that the source has regularly complied with the limits. Such a demonstration would constitute an affirmative defense to the allegation that the source is operating as a major source without complying with major source requirements.[6]

This allocation of responsibility is consistent with case law holding that those seeking to be excluded from a generally applicable regulatory scheme bear the burden of establishing their entitlement to the exclusion. This approach has precedent in the RCRA program; 40 C.F.R. 261.2(f) provides that a person claiming an exemption [from a RCRA permitting requirement] has the burden of proof of establishing that he is entitled to the exemption. This regulation has been upheld and interpreted to include both the burden of producing evidence and the burden of persuasion (that is, the burden of convincing the judge of all elements of the case). See, United States v. Eastern of New Jersey, 770 F. Supp. 964, 978 (D.N.J. 1991); Hazardous Waste Treatment Council v. EPA, 862 F.2d 277, 289 (D.C. Cir. 1988), cert. den. 490 U.S. 1106 (1989).

Initially, EPA believes it could implement this approach through a rule provision stating that a PTE limit that is not complied with regularly will not shield the source from enforcement for operation as a major source. This would make

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[6]In the case of a source that has PTE limits which are federally enforceable, EPA or a citizen (rather than the source) would continue to have the burden of showing that the PTE limit is not effective as a practical matter or that the source has not complied with it. In other words, there would be no change from the current system when EPA or a citizen seeks to establish that a source with federally enforceable limits has violated either the PTE limits or major source requirements.

clear that a State PTE limit that is not regularly complied with will not be considered effective, and therefore will not be considered in calculating the source's PTE if there is an enforcement action asserting that the source is major. This is the current law today for federally enforceable permits. In United States v. Louisiana-Pacific Corp., 682 F. Supp. 1122 (D. Colo. 1987), the Court determined that, where a source had not regularly complied with its minor source permit purportedly limiting PTE, that permit would not serve as a shield to liability for violation of PSD requirements, notwithstanding the fact that the permit was enforceable by EPA.

Approach 1 envisions that source owners would bear the responsibility for having effective limits for the entire time period during which a limit was needed (e.g. after commencing construction of a source for which such limits are needed to avoid major source preconstruction requirements). If it were later discovered by EPA or citizens that effective limits have not been in place, the source owner could not avoid enforcement actions for the time period associated with construction and initial operation by adding effective limits at a later date.

EPA plans to propose this approach as one alternative for satisfying its obligation to assure compliance incentive effectiveness. Among the issues to be examined in considering this option are:

- whether the EPA should require notice from the source or the State that the source is relying on a non-federally enforceable permit (i.e. a permit not directly enforceable by EPA and citizens in federal court) as a shield from a major source requirement.

- the extent to which the EPA should limit the use of such permits to facilities or companies that are otherwise in compliance with the Act;

- whether this option should be limited to permits issued by State or local authorities with authority to enforce the SIP.

2. Illustrative examples

The following examples illustrate how this option would be implemented:

Example 1. A source has a permit that is not federally enforceable. Material usage and content limits in the permit are enforceable as a practical matter, and the source did not obtain a PSD permit. However, the source regularly violates the material usage and content requirements in its permit. The source's records show that, although there may

be no clear record as to whether the source has actually emitted 250 tons per year for any 12-month period, the source has the potential to emit 250 tons per year. Because the source did not comply with its State permit, EPA or citizens could bring enforcement action against the source for failure to comply with major source requirements of the Act.

Example 2. A source has a permit that is not federally enforceable and that requires use of a carbon adsorber to control VOC emissions. A federal inspector observes that the carbon adsorber is not being operated and maintained properly, and observes breakthrough (that is, no control) during the inspection. Upon review of the permit, it contains no requirement for any recordkeeping demonstrating that the carbon bed is being regularly regenerated. In addition, the owner can provide no evidence that the carbon bed is being maintained with sufficient regularity. The control device needs to operate at 70 percent or better to achieve minor source levels. For this case, the source would be subject to an enforcement action for violations of major source requirements. Even though there is no evidence that the source is regularly violating its limit, the burden is on the source owner to demonstrate that the source has an effective set of requirements that would allow the EPA or citizens to determine whether it was in violation.

Approach 2: Streamlined federal enforceability

1. Description of approach

Under this approach, EPA would retain the current requirement that PTE limitations must be federally enforceable, but streamline administrative requirements to address concerns that have been raised.

In light of the D.C. Circuit's holding that EPA has not adequately explained the need for federal enforceability, EPA would provide an enhanced rationale for how the federal enforceability requirement could be considered a reasonable means of ensuring compliance incentive effectiveness. In addition, the following specific steps would be taken to streamline the current administrative process for achieving federal enforceability of limits:

- EPA would finalize the amendments to 40 CFR 51.161 that were proposed on August 31, 1995 in order to provide States with explicit discretion to limit up-front public review in minor NSR programs to those situations deemed to be environmentally significant. EPA believes that current minor NSR programs allowing such discretion already create

limits that can be enforced by EPA and citizens in federal court. The proposed rulemaking amendments would significantly broaden States' discretion to limit public review, and would eliminate any ambiguity or uncertainty that may exist over the enforceability of these permits.

- EPA would also make clear in rulemaking language that similar discretion would exist for federally enforceable State operating permit (FESOP) programs.

- States would not be required to provide EPA with an up-front notification before permits are issued in cases where public notice is not required. Rather, States would periodically (semi-annually or annually) provide EPA with a list of PTE limits that have been issued to sources seeking to avoid federal major source requirements. EPA would make this information available to the public.

- States would still be required to submit rules and programs to EPA for approval into the SIP. Rule amendments would guarantee that State limits issued under such program would be recognized from the time the limits were established, so long as the limits were enforceable as a practical matter. This would ensure that such limits would be recognized during the time period for which EPA approval of the State program is pending.[7]

2. Issues discussion

a. State discretion on appropriate level of public review.

Among the objections to preserving federal enforceability of limits as a requirement is a perception that federal enforceability cannot be accomplished without requiring public review of any permit approval action which is taken to create limitations on potential to emit. The EPA believes that a permit limit can be enforceable by the EPA and citizens under the Clean Air Act even if the permit was not issued with public review. The EPA believes that States, as recently proposed with respect to the minor NSR and Title V programs, can be given broad discretion with respect to judgements on which actions establishing or revising PTE limits are of sufficient environmental significance to warrant up-front public review. The EPA plans to solicit comment on whether providing such

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[7]Historically, EPA has required that State programs be approved through rulemaking before the PTE limits established under that program could be federally recognized as limiting PTE. This has created potential adverse consequences for a source possessing a limit that is enforceable as a practical matter when the State's program has not yet been approved by EPA.

discretion in all programs utilizing PTE limits would help to alleviate the administrative objections to retaining federal enforceability.

b. Voluntary acceptance of the federal enforceability of State limits

Another alternative to eliminate possible delay to the source would be to require that PTE limits be federally enforceable in order to be federally recognizable, but to allow sources to voluntarily accept the federal enforceability of a State limit. This would eliminate the need for approval of the underlying State program. EPA plans to explore the viability of this approach in the PTE rulemaking.

Compliance incentives and citizen enforcement

EPA plans to take comment in the rulemaking on two broad issues involving compliance incentives and citizen enforcement. The first issue is whether differing opportunities for citizen enforcement create significant differences in the strength of compliance incentives for sources under Approaches 1 and 2. A second issue, which arises under both approaches, is whether citizens have adequate access to the information needed to identify violators and bring successful enforcement suits.

Regarding the first issue, EPA has generally presumed that the possibility of citizen enforcement action enhances compliance with environmental laws. As part of the rulemaking, EPA plans to consider whether the prospect of citizen suits can enhance the compliance incentive effectiveness of limits on sources' potential to emit.

The ability of citizens to enforce permit requirements under Clean Air Act section 304 tracks that of the federal government. The Agency will request comment on the extent to which the presence or absence of federal enforceability affects citizens' practical ability to bring enforcement actions against sources in violation. In reference to Approach 1, the Agency will seek information on the number of States in which standing issues could prevent citizen suits to enforce PTE limits. EPA also is interested in whether citizens would be able to effectively enforce major source requirements in most circumstances under Approach 1.

The second broad issue relates to citizens' access to information. One difference between the federal government's and citizens' opportunity to bring suit is the ability of the federal government to obtain access to facility information and records through subpoena and inspection powers. It has been suggested to EPA that the relatively few number of citizen suits under the CAA is due in part to inadequate access to records. To be able to

enforce a source's limit, citizens need access to the permit and compliance records. To enforce the major source threshold, citizens also need information demonstrating that the source's potential or actual emissions exceed the major source threshold. The Agency will seek comment on the extent to which citizens currently have access to the information required, and on whether there are reasonable ways to enhance citizens' access to information under either Approach 1 or 2.

Information on a facility's potential to emit is particularly difficult for citizens to obtain. One possible way to address this problem would be to require a source or the State to provide notice to EPA when the source takes State or local limits on its PTE. Such notice might include a statement regarding the assumptions used in calculating the uncontrolled PTE, absent the State or locally required limits or control equipment. Citizens could then access such information through EPA. The Agency also will seek comment on providing safeguards for claimed "proprietary business information" in releasing the notification to the public.

III. Practical enforceability of limits

Whether a PTE limit is "effective" depends in part on whether that limit is enforceable as a practical matter. EPA therefore believes that questions concerning enforceability as a practical matter will be among the most important addressed in the PTE rulemaking.

Definition of "enforceable as a practical matter"

Under either Approach 1 or Approach 2, the EPA would consider amending current rules to require that emission limitations used to limit a source's potential to emit be "enforceable as a practical matter." The rule would require limitations to:

- be permanent;
- contain a legal obligation for the source to adhere to the terms and conditions;
- not allow a relaxation of a SIP requirement;
- be technically accurate and quantifiable;
- identify an averaging time that allows at least monthly checks on compliance (that is, monthly or shorter averages are encouraged; where this is unreasonable, longer averages would be required to be accounted for on a rolling monthly basis); and

- require a level of recordkeeping, reporting, and monitoring sufficient to demonstrate compliance with the limit.

In addition to these general criteria for ensuring that limits are verifiable and otherwise enforceable, the EPA intends to request comment on:

- Whether EPA regulations should more specifically describe the minimum elements of practicable enforceability. For example, should the regulations include language on the form in which limits must be expressed to be effective -- more specifically, principles from section III of EPA's June 13, 1989 guidance on limiting potential to emit in new source permitting (e.g., restrictions on use of emission limits, requirement that limits include operating parameters and underlying assumptions in cases where add-on controls operating at specified efficiency are required, independent enforceability of production and operational limits)?

- Whether EPA regulations should provide examples of terms that would be inappropriate in a PTE limit. For instance, the regulation might list as examples long-term (e.g. annual) emission rate limitations, limits that cannot be directly correlated with the relevant regulatory threshold (e.g. opacity limits to a PM threshold), or limits based on erroneous or unsupported generic emission factors.

EPA's initial thinking is that the rule would not provide specific requirements regarding the "appropriate level" of recordkeeping, reporting and monitoring, nor would the regulatory text list examples of situations that are prohibited. EPA notes that guidance issued on June 13, 1989, regarding practicable enforceability is still the most comprehensive statement from EPA on this subject. EPA would, within resource limitations, and with the help of State and local agencies, work to develop additional guidance where needed. In this regard the EPA would solicit comments on examples that could be provided in guidance or in the preamble to the final rule amendments.

IV. State program effectiveness

As stated above, the effectiveness of a State program affects both whether PTE limits are typically issued in a form that is practicably enforceable, and whether sources have substantial incentives to comply with their limits. Therefore, an issue to be addressed in the rulemaking is whether EPA should specify minimum effectiveness criteria that State programs must satisfy for the limits they create to be recognized as limiting PTE -- and if so, whether there should be a mechanism for EPA evaluation of these programs.

The Agency historically has required that State programs meet minimum criteria -- for legal authority, resources, and substantive and procedural aspects of permitting programs -- in order for the limits they create to be recognized as limiting PTE.

Some considerations influencing state program effectiveness are susceptible to evaluation before (or at the time) the PTE limits created by the program are relied upon by a source. These "front-end" considerations include questions of State air program "infrastructure," such as whether the program possesses adequate resources and whether there exists adequate legal authority for enforcement. In addition, there are considerations related to the adequacy of each program or rule creating PTE limits -- specifically, rules governing the substantive and procedural aspects of permit issuance for individual sources, and "prohibitory" or "exclusionary" rules designed to limit the PTE of sources in particular categories.

Other considerations can only be evaluated on an ongoing basis -- notably, the effectiveness of State enforcement efforts in promoting compliance. This "back-end" aspect of State program effectiveness is discussed separately below.

Front-end considerations

1. Description of approaches

Under Approach 1, EPA would not require up-front review or approval of State or local rules or programs for creating PTE limits. EPA would presume that these programs possess an adequate infrastructure, adequate legal authority for enforcement, and adequate permitting procedures. EPA would take comment on whether it should maintain authority to deem a State program generally "ineffective" at any time if clearly identifiable deficiencies in one or more of these State program elements were present, based on criteria established by EPA. Such a remedy could be appropriate, for example, if a program issued significant numbers of permits that are not enforceable as a practical matter. The result of deeming a program ineffective could be to render ineffective all limits created by that program, or to render ineffective any limits issued after the date of the ineffectiveness finding. EPA would take comment on this issue and on procedures for determining that a State program is ineffective.

Under Approach 2, EPA would continue to evaluate State rules and programs that create PTE limits, with the streamlining changes described under the heading "Approach 2: Streamlined Federal Enforceability."

Under both Approach 1 and Approach 2, the EPA would require that an "effective limit" must be obtained from the agency generally responsible for air quality permits. Limitations from other State or local authorities could not be taken into account.

2. Criteria for State program effectiveness

a. Overview

EPA initially believes the front-end State program effectiveness issues to be addressed in the PTE rulemaking are the following:

- Should a State have devoted a certain level of resources before its program can be considered effective and therefore able to create PTE limits? EPA plans to solicit comment on this issue. Though it may be possible to determine on an audit basis whether a State's resources are adequate, the level of resources needed will be particular to a State's strategy for addressing PTE, and so cannot be specified in advance by EPA.

- Should a State be required to have adequate legal authority for enforcement before its PTE limit program can be considered effective?

- Should the State's permitting regulations be required to meet minimum criteria in order to be able to create PTE limits? In its June 28, 1989 Federal Register notice on PTE, EPA required State permitting programs to meet certain criteria in order to yield federally recognizable PTE limits. Relevant to this discussion, the programs could not allow for the relaxation of a limit in the SIP, and the program had to provide for public and EPA notice of permit issuance. (See further discussion below.)

- Are there other criteria that should be met for a State program to be able to create PTE limits? EPA plans to solicit comment on this question.

b. Procedures to ensure practical enforceability of limits

EPA will consider in the rulemaking whether procedural requirements are needed to help ensure that the limits issued by a State program are enforceable as a practical matter. If so, such procedures could be required either as necessary elements of an effective State program, or -- if there is no up-front review of State programs under Approach 1 -- as necessary conditions of an effective limit. The procedural issues that EPA is currently aware of concern notice and an opportunity for review by the public and EPA.

This paper already has described the way that EPA would address the public participation and EPA notice issues under its streamlined federal enforceability approach (see above). However, these issues arise whether or not PTE limits are required to be federally enforceable. EPA plans to take comment and consider the appropriate way to address these issues under Approach 1. One option identified by EPA is that sources receiving State-enforceable PTE permit limitations that are not federally enforceable, or the State issuing these limits, could be required to notify the EPA within 3-6 months of the permit, and to provide the EPA with a copy of the permit. EPA notification and approval would not be required before the State could issue the permit or before that permit becomes effective. The EPA would provide the public access to the permits.

In connection with public participation and EPA notice, EPA plans to take comment on:

- whether there are types of permits for which a minimum level of public participation in establishment of PTE limits should be required, in view of EPA's August 1995 proposal regarding public comment in minor new source review programs.

- whether notice and an opportunity for EPA review carries with it additional certainty for the source that its limit will not later be found ineffective.

- whether notice to EPA of draft permits should be required, or whether EPA should instead rely on a system of auditing permits already issued.

Questions of public participation and EPA notice also are relevant to issuance of "prohibitory" or "exclusionary" rules designed to exclude certain qualifying sources from major source requirements. As these generic rules limit the PTE for potentially large numbers of sources, public participation and prior notice to EPA of the proposed State or local rule may be appropriate whether or not limits are required to be federally enforceable. EPA will seek information on the extent to which notice to the public is already part of State rulemaking procedures. The Agency also will seek comment on whether notice to EPA of the draft or proposed rule would be reasonable and add certainty to sources' reliance on generic rules.

3. Possible mechanisms for State program evaluation

If there are some substantive criteria for an effective State program, the rulemaking must also address whether there will be a mechanism for evaluation of the State program infrastructure. EPA initially sees three options.

1. EPA articulates minimum effectiveness criteria for State programs, but does not require prior approval of a State program before limits established by the State can be federally recognizable. Instead, EPA audits State programs and retains the ability to deem a State program "ineffective" at any time.

2. EPA establishes minimum effectiveness criteria for State programs, and EPA establishes by rule a subsequent informal review and approval process (e.g., an exchange of letters between EPA and the State). Under this option, the process would be established as part of the original rule, but no additional case-by-case rulemaking would be needed for approval of individual State programs. State programs would be deemed effective upon approval as being capable of creating PTE limits.

3. EPA establishes minimum effectiveness criteria for State programs, and EPA formally reviews and approves programs through rulemaking. State programs would be deemed effective upon completion of the rulemaking.

EPA notes that, currently, many State PTE programs have already received approval through rulemaking. EPA expects that there would be no need to re-evaluate these programs.

Back-end considerations: Effectiveness of State enforcement

The two approaches described above for ensuring compliance incentive effectiveness -- "State and locally enforceable limits", and "streamlined federal enforceability" -- focus on sanctions available against a source directly when the source fails to comply with its PTE limit. EPA will also explore whether it should retain the ability to deem a State program "ineffective" where non-compliance with PTE limits is common due to the lack of a credible State enforcement program. This option has historically been available to EPA because approval of PTE programs into the SIP allows EPA to withdraw that approval where appropriate, and would be retained under Approach 2.

Under Approach 1, EPA will take comment on whether it should establish a federal remedy for program-wide failure to assure effectiveness. Preliminarily, EPA believes such a remedy would involve deeming a program "ineffective" such that any limit established under that program would no longer be recognized as limiting a source's PTE. EPA will solicit comment on the appropriate procedures for deeming a State program ineffective from an enforcement standpoint.

V. Transition issues

Description of approach

In the interim, pending action to adopt Approach 1 or Approach 2 (or some other approach), EPA would plan to extend the transition period for section 112 and title V, contained in EPA's policy memorandum dated January 25, 1995, for an additional time period that extends from January 1997 to allow for promulgation of a final PTE rule.

Discussion

EPA recognizes that certain approaches discussed in this paper might establish new requirements or procedures for ensuring the effectiveness of PTE limits. EPA believes that, given the general streamlining nature of the options discussed in this paper, the potential for disruption from the current state of affairs is small. However, approaches set forth in this discussion paper differ from those contemplated in EPA's January 25, 1995, memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," and other agency guidance on potential to emit. In the PTE rulemaking, EPA plans to request comment on any transitional issues that may be raised by past reliance on guidance contained in the January 25, 1995, memorandum or other guidance that differs substantively from the new direction that EPA will be taking in response to decisions of the D.C. Circuit. EPA will expressly consider whether any temporary measures will be needed to ensure a smooth transition to the approach finally adopted in the PTE rulemaking.

Another issue related to potential to emit is whether EPA should adopt rulemaking amendments that would provide an exemption for sources with actual emissions significantly less than major source thresholds. In a guidance memorandum dated November 14, 1995 entitled "Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities," the EPA included a commitment to promulgate rulemaking amendments that would extend permanent relief to low-emitting sources, excluding such sources from being classified as "major sources" for purposes of title V permitting. (The exact cutoff for what constitutes a low-emitting source would be determined in the rulemaking process.) As discussed above, since this November memorandum was issued the EPA has developed an option which would delete the requirement for PTE limits to be federally enforceable and allow reliance on limits that are State-enforceable. The EPA believes that allowance for use of State-enforceable limits (as well as other streamlining options in this paper) should significantly reduce the burden to a source in obtaining a PTE limit, and may provide an effective solution for the issues raised at that time. Accordingly, before proceeding with further

rulemaking concerning such an approach, the EPA seeks comment from stakeholders on whether a small source exemption would still be needed if the Agency adopted the options being put forward today.

A.7.12

REF # [Other REF #'s] DOC@	DATE AUTHOR Document Title or Description	ABSTRACT Other Documents to which this Memo Refers: *Sections of 40 CFR 70 to which this Memo Applies:*
A.7.12 [A.4.9, A.8.4] @A.4.9	3/1/96 Kellam, Robert G. **Letter to Donald P. Gabrielson, Pinal County Air Quality Control District (AZ)**	For some sources, such as open pit mines, there are issues related to determining whether the source is major. The issues discussed include: 1) PTE should be determined based on emissions at the point where emissions are released (rather than, presumably, when the emissions cross the property line). 2) If some sources in a source category have installed control equipment on various emissions units or activities, a PA should presume that these emissions are nonfugitive for similar sources. 3) If a facility or source falls within a source category which has been listed pursuant to §302(j) of the CAA, then all fugitive emissions of any air pollutant from that facility or source are to be included in a Title V applicability determination. 4) Until EPA completes reconsideration of its collocation rule, PA's have the discretion (but are not required) to include fugitive emissions from sources outside of a listed source category, that are collocated with the affected facility, when they are determining whether the source as a whole is major under Title V. Refers to: 10/25/95 Gabrielson letter to Lydia Wegman (NOT attached); 10/16/95 Wegman memo (see A.8.3—NOT attached); 3/8/94 Wegman memo (see A.4.3—NOT attached); 10/21/94 Seitz memo "Classification of Emissions from Landfills for NSR Applicability Purposes" (not compiled herein and NOT attached—see NSR/PSD Guidance Notebook for copy); 6/2/95 Wegman memo (see A.4.7—NOT attached). *§70.2 (major source)*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

AUG 27 1996

MEMORANDUM

SUBJECT: Extension of January 25, 1995 Potential to Emit Transition Policy

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241A)

TO: See Addressees

This memorandum extends the Environmental Protection Agency's (EPA) January 25, 1995, transition policy for potential to emit (PTE) limits relative to maximum achievable control technology (MACT) standards issued under section 112 of the Clean Air Act. In addition, this memorandum discusses the implications of a recent court decision relative to the title V operating permits program.

Background

Many MACT standards apply only to major sources, that is those with a PTE greater than a given level. A source's PTE, that is, the amount the source could possibly emit, is affected by its maximum physical capacity to operate and emit and by enforceable limits. The current definition of PTE for the MACT program, which is contained in 40 CFR part 63, subpart A, requires that limits affecting a source's PTE must be enforceable by the EPA and citizens in order to be taken into account in the PTE calculation. These regulations are currently under review, and the EPA is engaged in a rulemaking process to amend the current requirements. The EPA is currently reviewing information resulting from a stakeholder process that was designed to explore options related to this rulemaking. Further information on options being considered is contained in Attachment 1, which is a stakeholder discussion paper of January 31, 1996.

The Current Transition Policy

In a policy memorandum of January 25, 1995, the EPA announced a transition policy. This transition policy was to alleviate concerns that sources may face gaps in the ability to acquire federally-enforceable PTE limits because of delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps would not create adverse consequences for States or for sources, the EPA provided that for a 2-year period extending from January 1995 to January 1997 (for sources lacking federally-enforceable limitations), State and local air regulators have the option of treating the following types of sources as non-major:

(1) sources who maintain adequate records to demonstrate that actual emissions are less than 50 percent of the major source threshold, and

(2) sources emitting between 50-100 percent of the threshold, but holding State-enforceable limits that are enforceable as a practical matter.

The National Mining Decision

In the National Mining court decision (National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. 1995), the court addressed hazardous air pollutant programs under section 112. The court found that EPA had not adequately explained why only federally-enforceable measures should be considered as limits on a source's PTE. Accordingly, the court remanded the section 112 General Provisions regulation (40 CFR part 63, subpart A) to EPA for further proceedings. Notably, in National Mining the court required the EPA to reconsider the Federal enforceability requirement, but did not vacate the requirement. As a result, the requirement for Federal enforceability is still in effect.

Extension of Transition Policy

It is unlikely at this time that on-going efforts to amend the PTE requirements in the MACT standard General Provisions, to address the National Mining decision, will be completed before January 1997. These rule amendments will affect any Federal enforceability requirements that may apply in the future for PTE limits under the MACT program. As a result, it is likely that after January 25, 1997, there will continue to be uncertainty with respect to the Federal enforceability of limits, and thus the basis for the January 25, 1995, transition policy will

continue to be valid. The EPA is, therefore, extending the transition period for the MACT program for an additional 18-month period (January 25, 1997 to July 31, 1998).

Implications of Recent Court Decision for the Title V Program

In Clean Air Implementation Project vs. EPA, No. 96-1224 (D.C. Cir. June 28, 1996), the court remanded and vacated the requirement for Federal enforceability for PTE limits under part 70. Because the court vacated this requirement, the term "federally enforceable" in section 70.2 should now be read to mean "federally enforceable or legally and practicably enforceable by a State or local air pollution control agency" pending any additional rulemaking by the EPA.

The EPA interprets the court order vacating the part 70 definition as not affecting any requirement for Federal enforceability in existing State rules and programs, that is, whether Federal enforceability is required as a matter of State law. Pending the outcome of the current rulemaking effort, the EPA believes that States are not likely to pursue submittals for program revisions. There may, therefore, be States wishing to continue to observe the transition policy. Accordingly, the EPA is extending the transition policy as it relates to title V permitting for an additional 18 months (January 25, 1997 through July 31, 1998).

Implications for New Source Review

Neither the January 25, 1995, transition policy, the National Mining Association court decision, nor the Clean Air Implementation Project court decision impact the New Source Review (NSR) and prevention of significant deterioration (PSD) programs. The EPA's current policy with respect to PTE issues related to the NSR and PSD programs remains as described in the January 22, 1996, policy memorandum, "Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit," which is included as Attachment 2.

Distribution/Further Information

We are asking Regional Offices to send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. The Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718; Adan Schwartz of the Office of General Counsel at 202-260-7632; or Charlie Garlow of the Office of Regulatory Enforcement at 202-564-1088. The document is also available on the technology

transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachments

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region I
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X
Regional Counsels, Regions I-X
Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

cc: C. Garlow, 2242A
J. Ketcham-Colwill, 6103
A. Schwartz, 2344
T. Smith, MD-12

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August 29, 1996

MEMORANDUM

SUBJECT: Clarification of Methodology for Calculating Potential to Emit (PTE) for Batch Chemical Production Operations

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: See Addressees

This guidance memorandum is to clarify the Environmental Protection Agency's (EPA) policy regarding the appropriate methodology for determining PTE for batch chemical operations in light of inherent physical limitations on such sources' PTE arising from the inability of a source to use a given operation unit for the production of more than one product at a time.

Summary of Guidance

The guidance (Attachment 1) contains a discussion of the batch chemical industry and the steps for determining a source's PTE. The EPA includes as part of the guidance a document (Attachment 2) prepared by the Synthetic Organic Chemical Manufacturers Association (SOCMA). The EPA approves the methodology suggested by SOCMA, so long as the methodology incorporates an appropriate list of products and raw materials. The guidance includes a discussion of how to use the SOCMA methodology for determining major source applicability.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. The Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718. The document is also available on the Technology Transfer Network Bullentin Board System (TTN BBS), under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachment

A.7.14-2

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air, Pesticides and 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 Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

cc: Bruce Buckheit, 2242A
Randy McDonald, MD-13
Adan Schwartz, 2344
Timothy Smith, MD-12
Air Branch Chief, Regions I-X
Regional Air Counsels, Regions I-X

OECA concurred: August 22, 1996

Attachment 1

CLARIFICATION OF METHODOLOGY FOR CALCULATING POTENTIAL TO EMIT (PTE) FOR BATCH CHEMICAL PRODUCTION OPERATIONS

I. BACKGROUND

In a January 25, 1995 memorandum, the Environmental Protection Agency (EPA) addressed a number of issues related to the determination of a source's PTE under section 112 and title V of the Clean Air Act (Act). One of the issues discussed in the memorandum was the term "maximum capacity of a stationary source to emit under its physical and operational design," which is part of the definition of "potential to emit." The EPA is currently conducting category-specific analyses to address issues related to the application of the "maximum capacity" principle to specific types of sources. This memorandum provides guidance on determining the maximum capacity of batch chemical production facilities to emit in light of physical limitations on the operation of individual units at such facilities.

II. TECHNICAL GUIDANCE FOR BATCH CHEMICAL PRODUCERS

Batch chemical production operations are those in which raw materials are charged into the system at the beginning of the process, and the products are removed all at once at the end of the process. The production occurs in discrete batches, rather than as a continuous process in which raw materials are continuously being fed, and products continuously being removed. Moreover, the addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. Systems in batch chemical operations consist of various equipment such as re actors, solid/liquid separators, dryers, distillation columns, extraction devices, and crystalizers, arranged in a series. The series (i.e., the particular equipment used and the sequence of that equipment) and the utilization rate (i.e., the time each piece of the equipment is in operation) may change with each different product produced (i.e., each production cycle). Many batch chemical facilities produce a wide variety of products.

Emissions from batch chemical production consist primarily of volatile organic compounds (VOC) and individual volatile organic hazardous air pollutants (HAP's). For a given batch production cycle which is used to produce a particular chemical from a given set of raw materials, emissions will occur at various unit operations in the production cycle. For a given production cycle, involving a specified set of raw materials, products, and unit operations, emission estimation methods are provided in an EPA document entitled Control of Volatile Organic Emissions from Batch Process -- Alternative Control Techniques Information Document (EPA-453/R-94-020, February 1994 (the Batch ACT).

Operation units (reactors, etc.) at batch chemical plants may not be dedicated to the production of a single chemical. Rather, the collection of operation units at a given plant site is available to manufacture a variety of different chemicals. The determination of worst-case potential emissions from batch chemical production at a given plant site, therefore, involve the following steps:

-- Identification of the possible batch production cycles that reasonably could be undertaken at the plant site (i.e., determination of the equipment present, and the chemicals that could be produced with that equipment);

-- For each batch cycle, determination of the VOC and individual HAP emissions; and

-- Determination of the worst-case annual VOC and HAP emissions, based upon the highest emitting combination of batch production cycles that, given the facility's inherent inability to use one operations unit for more than one production cycle at a time, could be undertaken at the facility over a year's time.

These steps are discussed in detail in a document prepared by the Synthetic Organic Chemical Manufacturers Association (SOCMA). This document is included here as Attachment 2. The EPA believes that the SOCMA methodology is a reasonable procedure to use for identifying worst-case potential emissions from a given batch chemical production operation.

The EPA explicitly clarifies that in calculating the potential to emit for batch chemical operations, it is not necessary to determine the maximum emissions for a worst-case hour of operation, and to multiply that value times 8760. It is physically impossible for the process to sustain the worst-case hourly emission rate over the entire batch and so the EPA deems it appropriate to take into account variations in the emissions rate over the course of the entire cycle. For this reason, in this instance, worst-case emissions may be determined by deriving an average rate over an entire production cycle and emissions may be calculated based on the greatest number of batches that could occur in a year's time according to the methodology in Attachment 2.

The EPA's approval of the methodology in Attachment 2 should not be construed as precluding a source from proposing alternative methodologies for calculating the PTE from batch chemical operations.

III. USE OF THE GUIDANCE FOR DETERMINING MAJOR SOURCE APPLICABILITY

A. List of Products that a Source is Capable of Producing

The SOCMA methodology reflects the maximum emissions from existing equipment given a list of chemicals to be manufactured with the equipment and given the raw materials used to manufacture those products. The list of products and raw materials should include all products that the source, in the exercise of due diligence and best engineering judgment, reasonably knows that it can produce.

The best engineering judgment regarding what a source is capable of producing might consider, at a minimum:

1. Products that this source currently produces or has produced in the past;

2. Products that this source reasonably can produce without having to change the physical or operational design of the source; and

3. Products that similar sources have produced.

However, the Agency acknowledges that a batch source cannot reasonably evaluate whether it is capable of producing a particular product (or what the emissions from producing that product might be) without a certain level of process design information. Accordingly, the Agency believes that a batch source need only consider products for which, in the exercise of due diligence, sufficient information is reasonably available to generate a reasonable estimate of PTE for that product as it might be produced at the source using the estimation methods outlined in the Batch ACT.

For example, the question has been raised as to how to perform a PTE calculation for chemicals that may not yet exist, for which there is no known use in commerce, or that may be manufactured by others with similar equipment, but which the source has attempted and failed to develop a process to manufacture and so does not have sufficient information to estimate potential emissions. The Agency's response is that a rule of reason applies in each of these instances and that the PTE calculation need not include such chemicals.

Exercising its best engineering judgment as to the products that the source is capable of producing, a source would ordinarily not consider the following types of products:

1. Products that would require a change in the physical design of the source to produce;

2. Chemicals which cannot reasonably be produced, including chemicals which cannot be reasonably produced in commercially viable quantities, chemicals which are not sold in commerce, and chemicals for which no commercial market is reasonably foreseeable or for which there is no known use in commerce; and

3. Products which the source may have the theoretical physical capacity to produce, but for which the source does not have the technical knowledge necessary to produce that product and cannot, through the exercise of reasonable due diligence, obtain the requisite technical knowledge.

This is not an exhaustive list of methods that a best engineering judgment regarding what a source is capable of producing could include. However, a list of products identified using these methods should provide a large enough list of products that, while the source may have overlooked a particular product that would be used as the worst-case product, it will likely have included another product that results in an equivalent PTE calculation.

Inherent in many of these determinations regarding the best engineering judgment as to which products a source should, or should not, include in its PTE analysis is a degree of decision making by the source. The EPA believes that a source that exercises due diligence in making these decisions under the criteria identified above will generate a PTE amount that can be relied on by both the source and permitting authorities in determining whether the source is major under the Clean Air Act's requirements. There may be additional justification as to why a particular product should or should not be included in the engineering judgment of what a source is capable of producing. In making these engineering judgments, a source that is conservative in its assumptions and takes an inclusive view as to which products it is capable of producing would have a greater degree of certainty in its determination as to whether it is major than a source that seeks to exclude products from its determination. The source that takes a more conservative approach would also be in a much better position to convince an enforcement authority that its determination regarding the products that it could produce was within the boundaries of its best engineering judgment. The Agency believes that it is in the source's best interest to be inclusive rather than exclusive in evaluating the worst-case set of chemicals that may be produced.

Clearly, however, whether or not the source is justified in excluding a particular product from its initial PTE calculation, **before manufacturing any product not included in the PTE calculation**, the source must reevaluate its PTE estimate and obtain any required permits or permit revisions. Such permitting actions might include modifications of major or minor source preconstruction permits.

B. Minor/Major Determination

Sources that have taken a conservative approach in exercising their engineering judgment regarding the products that they are capable of producing, and applied the SOCMA methodology to these products and determined that their PTE is below a major

threshold level should be confident that they are an area source. A rule of reason applies to the degree of rigor to be employed in performing the analysis. For a source that concludes its PTE is just below the major source level, the EPA recommends that the source document any assumptions used in the engineering analysis, and that it exercise caution not to exclude products appropriate for inclusion under the criteria discussed above. This is particularly important when a facility has relied on a small number of products in its analysis as the possibility that an overlooked product could affect PTE calculations is higher in this instance than if the source had used a large number of products in its PTE analysis.

For sources with PTE calculations over major threshold levels, sources can also avoid major source status by obtaining permits that limit their PTE to minor levels. These synthetic minor permits can either specify the products that a source is authorized to produce or restrict the source from producing specific products that it is otherwise capable of producing. Sources that have calculated their PTE at amounts just under a major source threshold level may also want to obtain permits with emission levels that protect them from being classified as major to avoid having to recalculate PTE as new products are developed or in the event that their engineering judgment regarding the products that they were capable of producing was in error.

C. Changes in What a Source is Capable of Producing

The situation may arise where a source learns that it is capable of producing a product that was not included in its engineering analysis at the time that the PTE calculation was performed. If this new product would raise a source's calculated PTE, and particularly where it would raise the source's calculated PTE from below major levels to above major levels, the source may have to make appropriate changes to any permit that it currently holds or obtain an entirely new permit. If the PTE will exceed that of a major source, the facility must then comply with all applicable major source requirements. However if this new product would not affect the "worst-case" PTE calculation that the source has already performed, no further actions would be required pursuant to Federal requirements although State requirements may require that the source take some action such as changing its permit terms to reflect the new product.

On the other hand, where a citizen or an enforcement authority demonstrates that the source was reasonably capable of producing the new product all along, the source could be found in violation back until the point in time at which an engineering judgment would have shown that the facility was reasonably capable of making this product. The Agency has published general guidance concerning good faith assumptions in potential to emit permitting. See the June 13, 1989 memorandum, "Guidance on Limiting Potential to Emit in New Source Permitting."

IV. CONSIDERATION OF ADDITIONAL SOURCES

The methodology in Attachment 2 relates only to emissions from batch chemical production operations. Additional sources may be present at a batch chemical plant and, if so, potential emissions from such sources should be taken into account in determining the facility's potential to emit.

Attachment 2.
HOW TO CALCULATE POTENTIAL EMISSIONS FROM A BATCH PROCESS TO DETERMINE MAJOR SOURCE STATUS UNDER THE CLEAN AIR ACT

1.0 Introduction

2.0 Five (5) Step PTE Emission Estimation Methodology

- **2.1** ACT Derived AERs
- **2.2** Percent Equipment Utilization
- **2.3** Interchangeable Equipment Determinations
- **2.4** Data Tabulation
- **2.5** Selection of PTE

3.0 Model PTE Calculations

SECTION 1.0--INTRODUCTION

In January 1995, the Agency published guidance on several issues related to "potential to emit" (PTE). The Agency stated at that time that it would issue additional category-specific technical assistance and guidance on PTE issues.

The following guidance is being issued to assist sources that must calculate potential emissions from batch processes. The calculation of potential emissions from these facilities must consider equipment utilization rates for each product/process and their relationship to one another. The methodology is based on equipment utilization rates and the constraints that exist in using limited equipment to produce a finite list of manufactured products.

The following methodology provides for documentation of both the products manufactured and the equipment used to manufacture these products. The methodology begins with the largest emitting product/process and methodically rules out other processes that cannot be manufactured at the same time. The facility should maintain the documentation required to perform this analysis as part of its routine recordkeeping.

SECTION 2 - EMISSION ESTIMATION METHODOLOGIES

The following five step procedure should be followed to calculate potential to emit to determine if a batch processing facility is a major source. Each step is described below.

SECTION 2.1 - CALCULATION OF PRODUCT SPECIFIC ANNUAL EMISSION RATES FOR SPECIFIC EQUIPMENT TRAINS NEEDED TO PRODUCE SPECIFIC

PRODUCTS (STEP #1)

The USEPA's 1994 Alternatives Control Technology (ACT) Document contains several equations for calculating emissions for various types of batch operations. In addition, the ACT Document implies that the following methodology should be used for converting these emission calculations to Annual Emission Rates (AER):

Equation 2.1:

(AER) Product M, Pollutant X =

[ACT Derived Total Emissions Per Batch x 8760 Hours/Yr]

[Time in hours required for the piece of equipment in The Batch Train that is used the most]

Where AER = Annual Emission Rate for Pollutant X for Product M to be produced in a specific batch train. (It should be noted that the above calculation assumes that Product M is the only product produced in the batch train.)

To complete Step 1, calculate the AER values for every pollutant regulated by the Clean Air Act for every batch train needed to produce a specific product.

SECTION 2.2 - CALCULATION OF EQUIPMENT UTILIZATION PERCENTAGES FOR EACH PIECE OF EQUIPMENT IN THE BATCH TRAIN NEEDED TO PRODUCE A SPECIFIC PRODUCT (STEP #2)

Step 2 of the PTE analysis can be completed by extracting from batch sheets the time needed to run each piece of equipment in every batch train. The following equation should be used to calculate percent utilization (i.e., percentage of time required for every piece of equipment for every product which can be produced in the batch train):

Equation 2.2:

Percent Utilization Product M =

[100% x (Time in hours of individual piece of equipment)]

[Maximum hours for piece of equipment with the largest time]

For this example, the batch train for hypothetical Product H consists of a reactor, a centrifuge, and a dryer. Reaction, centrifugation, and drying times for Product H are 120, 240, and 120 hours, respectively. Therefore, using Equation 2.2, the percent utilization for the reactor is:

100% x 120/240, or 50%.

Similarly, percent utilizations for the centrifuge and dryer are 100% and 50%, respectively.

SECTION 2.3 - DETERMINATIONS INVOLVING INTERCHANGEABLE EQUIPMENT (STEP #3)

To complete Step 3, identify interchangeable or alternative equipment which can be substituted for equipment normally used to make a particular product by examining batch sheets. For this example, note that reactor R-6B and centrifuge C-4 can be substituted for reactor R-5 and centrifuge C-5.

SECTION 2.4 - TABULATION OF AER, PERCENT UTILIZATION, AND INTERCHANGEABLE EQUIPMENT DETERMINATIONS (STEP #4)

Step 4 can be completed by recording, in a Batch Percent Utilization/Emission spreadsheet, the AER values (from Step 1) for each product that emits a regulated pollutant. In the same spreadsheet, record percent utilization (Step 2) for each piece of equipment which makes up the batch train for a specific product and also indicate interchangeable equipment (Step 3). It should be noted that separate spreadsheets must be filled out for each hazardous air pollutant (HAP) and for each criteria pollutant. Examples are provided in Section 3 of this manual to help the user complete Step 4 of the procedure.

SECTION 2.5 - SELECTION OF PTE (STEP #5)

SECTION 2.5.1 - PTE FOR A SINGLE PIECE OF BATCH PROCESSING EQUIPMENT

PTE for a batch process which requires only a single

piece of equipment (e.g., one reactor) is equal to the worst case Annual Emission Rate (AER) for that piece of equipment. Worst case AER is determined by first computing AER values for every product which can be produced in this piece of equipment and then by selecting the highest AER value. To summarize, PTE for a single piece of equipment is equal to the highest AER value and assumes that the product with the highest AER value will be the only product produced in that piece of equipment.

SECTION 2.5.2 - PTE FOR OTHER BATCH PROCESSING FACILITIES

PTE for batch processing facility with more than one piece of equipment must be determined by completing Step 5 of this procedure. To complete Step 5, examine the emissions and percent utilization data for each matrix generated in Step 4 and select maximum emissions for each pollutant by fully utilizing all available equipment which can be used to produce a particular product. Do not exceed 100% utilization for any piece of equipment. The examples in Section 3.0 will teach the user how to fill out a Batch PTE Spreadsheet.

SECTION 3 - MODEL PTE CALCULATIONS

A hypothetical custom chemical batch processing facility has 23 point sources which emit 3 HAPs (toluene, methanol and hexane) and one criteria pollutant (VOCs) during the manufacture of 20 products (identified as letters A through T.) To determine the applicability of Clean Air Act requirements such as Title V permitting, Reasonably Available Control Technology (RACT) standards, and Section 112 (g) for future modifications, this facility must determine its potential to emit and wishes to use the recommended calculation procedures.

3.1 Calculation of Toluene PTE

By following the calculation procedures and completing the Batch Percent Utilization Spreadsheet described in Section 2.4 above, we can see that, as indicated in Table 1A, toluene can be emitted from 7 batch reactors, 3 batch dryers, 2 batch centrifuges, and 1 thin film evaporator. Toluene is emitted in the production of 7 different products.

Product G is the largest emitter of toluene and requires batch reactor R-5 for the entire batch time (i.e., 100% utilization). Since reactors R-5 and R-6B are interchangeable, the maximum toluene emissions for

process G is two (2) times the toluene emission rate for one train or 2 x 3.92 = 7.84 TPY. By making this worst case selection, we have tied up both reactors R-5 and R-6B 100% of the time. Therefore, no other process can be run or considered that requires these reactors. Consequently, only Processes C and F can be run concurrently with Process G since all other products require reactors R-5 or R-6B. By inspection, there is no equipment conflict between C and F, so they can be operated concurrently 100% of the time. Therefore, their toluene emissions are added to twice G's emissions to calculate a total toluene plant-wide potential to emit of 9.1 ton/year (see Batch PTE Spreadsheet Table 1B which also serves as a final equipment conflict check).

3.2 Calculation of Methanol PTE

As indicated in Table 2A, methanol can be emitted from 7 reactors, 3 centrifuges, 1 thin film evaporator, 4 dryers, and 2 ion exchange units. Methanol is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product H is the largest emitter of methanol and requires 1 batch reactor (R-5) 50% of the time, 1 dryer (D-4) 50% of the time, and 1 centrifuge (C-4) 100% of the entire batch time. However, reactor R-5 and dryer D-4 can be run 100% of the time if both centrifuges C-4 and C-5 are used. The maximum methanol emissions for Product H would then be two (2) times the methanol emission rate for one train (2 x 3.2 = 6.4 TPY).

By making this worst case assumption, we have tied up reactor R-5, centrifuges C-4 and C-5, and dryer D-4 100% of the time. Therefore, no other process can be run or considered that requires this equipment. Consequently, by inspection of Table 2A, Product J can be eliminated because it uses centrifuges C4 and C5. Process J's use of reactor R-5 would not itself eliminate process J because reactor R-6B is interchangeable. Product L can be eliminated because it uses centrifuge C5. Products I and O can be eliminated because they both require centrifuge C-4.

The highest methanol emitter for remaining processes (Products E, K, M and N) is Process K which requires reactor R-1, centrifuge C-2 and dryer D-6. Including Process K in the PTE calculation eliminates Products M and N which, respectively, utilize reactor R-1 and dryer D-6.

The only remaining methanol emitter is Process E

which uses reactor R-5. Since reactor R-6B is available, Process E is included in the total methanol PTE calculations. Therefore, the methanol potential to emit can be calculated by summing emissions from Processes E, H, and K and is equal to 1.0 + 6.4 + 1.9 or 9.3 TPY (Table II-B).

3.3 Calculation of Hexane PTE

As indicated in Table 3A, hexane can be emitted from 8 batch reactors, 2 batch centrifuges, 1 still, 1 thin film evaporator, and 3 dryers. Hexane is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product S is the largest emitter of hexane and requires reactor R-1 and centrifuge C-4 100% of the time. Therefore, no other process can be considered that requires this equipment. Consequently, Products D, I, L, Q, and R can be eliminated because they all use reactor R-1.

By inspection, we can see that Product T is the next largest emitter of hexane and should be included in the total hexane PTE because it requires reactor R-6B 100% of the time. However, since reactor R-5 can also be used to produce Product T and there is "spare" capacity in both centrifuge C-5 and dryer D-1, an additional 13% of the time T can be run using reactor R-5. This limits out dryer D-1 at 100% of capacity. Therefore, dryer D-1 is at 94% utilization for Product T and centrifuge C-5 is at 33% utilization total (i.e., basic yearly batch x 1.13).

Product P is eliminated because there is 100 % utilization of dryer D-1 in making Products S and T. Since there is capacity in centrifuge C-5 to produce Product U concurrently with Products S and T, its emissions should be counted in the final hexane plant-wide PTE along with emissions from products S and T.

3.4 Calculation of Total HAP PTE

The total HAP PTE should be determined by first identifying the product with the largest (HAP) emission rate. In this case, Product S has the largest (HAP) emission rate (4.05 TPY of hexane) and fully utilizes reactors R-1 and centrifuge C-4. However, the third largest emitter of HAP is Product H which emits 3.2 TPY of methanol and which uses 50% of reactor R-5's, 100% of centrifuge C-4's, and 50% of dryer D-4's capacity. Product H's methanol emissions would be 6.4 TPY if reactor R-5, centrifuges C-4 and C-5, and dryer D-4 are run at 100% capacity. Since Product S's emissions are less than Product H's at full equipment utilization, Product H should

be selected and Product S emissions should be eliminated from the worst case PTE calculation. Therefore, reactor R-5 and centrifuges C-4 and C-5, and dryer D-4 are fully utilized. Any product using any one of these pieces of equipment other than reactor R-5 can be eliminated from the total HAP PTE calculation (Products A, C, D, I, J, L, O, P, Q, S, T and U).

The second largest emitter of a HAP is Product G which can utilize reactor R-6B and which emits 3.92 TPY of toluene. Since there are no equipment conflicts, its HAP emissions will be included in the total plant-wide HAP PTE.

Products B (2.44 TPY toluene) and E (1.0 TPY methanol) are eliminated from the total HAP PTE calculation because they use reactors R-5 or R-6B, which are fully utilized to make Products G and H.

The next largest emitter of a HAP is Product K which emits 1.86 TPY of methanol and which fully utilizes reactor R-1 and dryer D-6. Since this equipment is not used to make Products G and H, Product K's emissions should be included in the total worst case HAP PTE calculation.

Products R is eliminated from the total HAP PTE calculation because it uses reactor R-1.

Product M (10.55 TPY methanol) is eliminated because it uses reactor R-1.

Products F and N are eliminated because they use dryer D-6 which is tied up in the production of Product K.

Therefore, the total HAP PTE is 12.2 TPY and is determined by adding emissions from Products G (3.9 TPY toluene), Product H (6.4 TPY methanol), and Product K (1.86 TPY methanol).

Table IA
PROCESSES WITH MAXIMUM TOLUENE EMISSIONS
* R-5 and R-6B interchangeable; C-4 and C-5 interchangeable

PRODUCT	A	B	C	D	E	F	G
AER (TPY)	0.11	2.44	0.67	1.35	1.84	0.56	3.92
EQUIPMENT	PERCENT UTILIZATION						
R-1		64.00		23.00			
R-3			44.00				
R-4		74.00					
*R-5	50.00			100.00	100.00		100.00
R-6A							
*R-6B	100.00	100.00					
R-7							
R-8		48.00					
R-12					24.00		
C-2							
*C-4	100.00		15.00	39.00			
*C-5	50.00						
S-1							
S-2							
S-4							
L-1		52.00	100.00		36.00		
D-1			44.00	16.00			
D-2	53.00						
D-4							
D-5							
D-6	50.00					100.00	
IE-1							
IE-2							

R = reactor; C= centrifuge; S= distillation unit; L = thin film evaporator; D= dryer; IE = ion exchange

TABLE IB
TOLUENE POTENTIAL TO EMIT (PTE)

PRODUCT	G	C	F	TOTALS
EMISSIONS (TPY)	7.84	0.67	0.56	9.07
EQUIPMENT		PERCENT UTILIZATION		
R-5	100.00			100.00
R-6B	100.00			100.00
D-6			100.00	100.00
R-3		44.00		44.00
C-4		15.00		15.00
L-1		100.00		100.00
D-1		44.00		44.00

TABLE IIA
PROCESSES WITH MAXIMUM METHANOL EMISSIONS
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable

PRODUCT	E	H	I	J	K	L	M	N	O
AER (TPY)	1	3.22	0.24	1.58	1.86	0.21	0.55	0.53	0.6
EQUIPMENT	PERCENT UTILIZATION								
R-1			57.00		100.00	82.00	43.00		65.00
R-3			100.00						
R-4									
*R-5	100.00	50.00		40.00		100.00			30.00
R-6A								20.00	
*R-6B						44.00			
R-7									
R-8							100.00		100.00
R-12	24.00			42.00		41.00			
C-2				83.00	33.00		71.00		15.00
*C-4		100.00	57.00	42.00					10.00
*C-5				42.00		47.00			
S-1									
S-2									
S-4									
L-1	36.00								
D-1				100.00		35.00	43.00		
D-2									
D-4		50.00							
D-5								72.00	
D-6			79.00		100.00			100.00	100.00
IE-1							67.00		90.00
IE-2									90.00

TABLE IIB
METHANOL POTENTIAL TO EMIT (PTE)

PRODUCT	H	K	E	TOTALS
EMISSIONS (TPY)	6.44	1.86	1.0	9.3
EQUIPMENT	PERCENT UTILIZATION			
R-1		100.00		100.00
R-5	100.00			100.00
R-6B			100.00	100.00
R-12			24.00	24.00
C-2		33.00		33.00
C-4	100.00			100.00
C-5	100.00			100.00
D-4	100.00			100.00
D-6		100.00		100.00
L-1			36.00	36.00

TABLE IIIA
PROCESSES WITH MAXIMUM HEXANE EMISSIONS
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable.

PRODUCT	D	I	L	P	Q	R	S	T	U
AER (TPY)	2.13	0.73	1.83	0.59	1.2	1.02	4.05	3	0.33
EQUIPMENT	PERCENT UTILIZATION								
R-1	23.00	57.00	82.00		100.00	92.00	100.00		
R-3		100.00			45.00	92.00	70.00		
R-4				38.00	9.00				
*R-5	100.00		100.00				57.00		
R-6A									
*R-6B			44.00					100.00	
R-7									
R-8					9.00				100.00
R-12			41.00			100.00			
C-2									
*C-4	39.00	57.00		100.00	44.00		100.00	29.00	48.00
*C-5			47.00				14.00		
S-1						92.00			
S-2									
S-4									
L-1						92.00			
D-1	16.00		35.00	100.00			6.00	83.00	
D-2									
D-4									91.00
D-5									
D-6		79.00			12.00				
IE-1									
IE-2									

TABLE IIIB
HEXANE POTENTIAL TO EMIT

PRODUCT	S	T	U	TOTALS
EMISSIONS (TPY)	4.05	3.4	0.33	7.8
EQUIPMENT		PERCENT UTILIZATION		
R-1	100.00			100.00
R-3	70.00			70.00
R-5	57.00	13.00		70.00
R-6B		100.00		100.00
R-7				
R-8			100.00	100.00
C-4	100.00			100.00
C-5	14.00	33.00	48.00	95.00
D-1	6.00	94.00		100.00
D-4			91.00	91.00

TABLE IV
TOTAL HAP POTENTIAL TO EMIT

PRODUCT	H	G	K	TOTALS
EMISSIONS (TPY)	6.44	3.92	1.86	12.22
EQUIPMENT		PERCENT UTILIZATION		
R-1			100.00	100.00
R-3				
R-4				
R-5	100.00			100.00
R-6A				
R-6B		100.00		100.00
R-7				
R-8				
R-12				
C-2			33.00	33.00
C-4	100.00			100.00
C-5	100.00			100.00
S-1				
S-2				
S-4				
L-1				
D-1				
D-2				
D-4	100.00			100.00
D-5				
D-6			100.00	100.00
IE-1				
IE-2				

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

Mr. Carl R. York, Chief
Regulation Development Division
Air Quality Planning Program
Air and Radiation Management Administration
Maryland Department of the Environment
2500 Broening Highway
Baltimore, MD 21224

JUN 0 9 1997

Dear Mr. York:

In early November of last year, we received a letter dated November 1, 1996 from Mr. Robert LaCount of your staff. The letter raises several questions about the municipal solid waste (MSW) landfill NSPS/EG rule and related Title V major source applicability concerns. Because you have informed us that Mr. LaCount is no longer an employee of the Maryland Department of the Environment, Air Quality Program (AQP), we are responding to you on the noted questions.

Prior to addressing the questions, we would like to apologize for the delay in responding to Mr. LaCount's letter. The questions raised in his letter are complex and involve ongoing EPA policy decisions that required EPA headquarters input. The questions and our responses have been reviewed by staff within the Office of Air Quality Planning and Standards (OAQPS), the Office of General Counsel, the Office of Enforcement and Compliance Assurance, and the Office of Research and Development.

BACKGROUND

Also, before answering the noted questions, it will be useful to review the definitions of "major source" and "fugitive emissions" under the current 40 CFR part 70 rule and related EPA policy statements and issues.

Definition/Determination of Major Source Status
The definition of "major source" in section 70.2 of the operating permits rule is divided into three separate parts. Each part corresponds to Clean Air Act (CAA) requirements under 1)section 112, 2) section 302, and 3)part D of title I.

Under section 112, for pollutants other than radionuclides, a major source is 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 aggregate, 10 tons/year (tpy) or more of any hazardous air pollutant (HAP) which has been listed pursuant to section 112(b) of the CAA, 25 tpy or more of any combination of such HAP, or such lesser quantities as the Administrator may establish by rule.

Under section 302, a major source is a stationary source that directly emits or has the potential to emit 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, *as determined by rule by the Administrator*).

Under part D of title I, a major source is a stationary source, located in a) an ozone nonattainment area, and has the potential to emit 100 tpy or more of VOC or NOx in areas classified as "marginal" or "moderate", 50 tpy or more in areas classified as "serious", 25 tpy or more in areas classified as "severe", and 10 tpy or more for areas classified as "extreme"; b) the ozone transport region and has the potential to emit 50 tpy or more of VOC; and c) serious CO and PM-10 nonattainment areas and has the potential to emit 50 and 70 tpy, respectively.

Except for the major source definition under section 302, the part 70 major source definitions relating to section 112 and part D sources are silent on the issue of when fugitive emissions must be considered. However, the issue of when fugitives are to be counted in major source determinations is addressed in the March 8, 1994 memorandum entitled "Consideration of Fugitive Emissions in Major Source Determinations," from Lydia Wegman, Deputy Director, OAQPS. (See the enclosed.) To summarize the March 8, 1994 memorandum: under section 112, all fugitive emissions count toward major source applicability; under section 302 and part D of title I, fugitive emissions count toward major source applicability if they are from certain listed source categories. Thus far, twenty-seven categories of sources have been listed for which fugitive emissions must be considered in major source determinations. This list is codified in 40 CFR parts 51 and 52. To date, EPA has not listed MSW landfills as a source category for which non-HAP fugitive emissions need to be considered in major source determinations. (Please see the August 31, 1995 proposed revisions to part 70; 60 FR 45530, and 45547.)

It is important to note, however, that sources may be required to count their fugitive emissions if they are outside of any listed source category, but are nevertheless aggregated with it. For guidance regarding the aggregation of unlisted sources of fugitive emissions with listed sources of fugitive emissions, please refer to the June 2, 1995 memorandum entitled " EPA Reconsideration of Application of Collocation Rules to Unlisted Sources of Fugitive Emissions for Purposes of Title V Permitting," from Lydia Wegman, Deputy Director, OAQPS.

Given the above definitions of major stationary source, let's now consider when MSW landfill fugitive emissions can reasonably be collected, and therefore are not considered fugitive.

Definition/Determination of Fugitive MSW Landfill Emissions

40 CFR part 70.2 defines fugitive emissions as "emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening." When emissions can reasonably be collected, and therefore are not considered fugitive, is addressed in the enclosed October 21, 1994 memorandum "Classification of Emissions from Landfills for NSR Applicability Purposes," from John Seitz, Director, OAQPS. As this memorandum notes, MSW landfill gas collection and mitigation technologies have evolved significantly since 1987, and use of these systems has become much more common. Landfills are now constructed and retrofitted with gas collection systems for purposes of energy recovery and to comply with State and Federal regulatory requirements, including section 111 of the CAA. The use of collection technology by certain landfill sources, whether or not subject to 40 CFR part 60, subparts WWW or Cc, State Implementation Plan (SIP) requirements, or New Source Review (NSR) requirements[1], creates a presumption that collection of emissions at other similar landfills is reasonable. If a collection system could reasonably be designed for a landfill, then the emissions from that landfill are not fugitive emissions and should be considered in major source applicability determinations.[2] The Seitz guidance is applicable to the construction of a new landfill or the expansion of an existing landfill beyond its currently-permitted capacity.

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[1] For purposes of this letter, NSR is being defined to include both the Prevention of Significant Deterioration and nonattainment NSR programs.

[2] In the absence of actual emissions data, the preferred method for quantifying MSW landfill emissions is use of EPA's AP-42, Compilation of Air Pollutant Emission Factors.; other estimating procedures may be acceptable, as determined appropriate by the permitting authority. It is important to emphasize, however, that major source status under the CAA is based on what a source emits *or has the potential to emit*.

QUESTIONS AND ANSWERS

Your questions and EPA's responses are given below:

Q.1 For a MSW landfill that has a design capacity less than 2.5 million megagrams (Mg), should uncontrolled emissions be calculated if the MSW landfill is currently controlled by use of a federally enforceable gas collection and control system?

A.1 Yes. The following three cases provide selected examples of why there is a need to calculate emissions from landfills below 2.5 million Mg or 2.5 million cubic meters (m^3). It is also important to note that for NSR and title V applicability purposes, EPA classifies emissions as being either fugitive or non-fugitive, whether or not they are controlled or uncontrolled.

Case 1 -- An existing landfill with a design capacity below the NSPS/EG applicability thresholds of 2.5 million Mg or 2.5 million cubic meters could still be a major source under section 112, NSR, and/or title V. As you know, all non-fugitive emissions count toward major source applicability determinations. Under section 112, all fugitive emissions count toward major source applicability determinations. And, although MSW landfills are not within a listed source category, non-HAP fugitive emissions from MSW landfills may need to be considered in major source determinations when a landfill is collocated with a listed source. (See the June 2, 1995 memorandum from Lydia Wegman.)

Case 2 -- For an expansion or modification[3] to an existing MSW landfill beyond its currently permitted capacity, new emissions associated with the collection and control of the new or modified portion of the landfill may result in NOx or CO emissions in excess of the NSR significance or major source levels. These new emissions should be reviewed against the applicable applicability thresholds to determine if major new source review and title V permitting requirements apply.

Case 3 -- Approvable state 111(d) plans are required to include, under 40 CFR 60.25, an inventory of all designated facilities, including emissions data for the designated pollutants [e.g., MSW landfill gas emissions (measured as nonmethane organic compounds.)] This requirement includes MSW landfills below 2.5 million Mg or 2.5 million m^3. Where accurate emissions data is already available, or can reasonably be generated without undue expense or effort, states are required to include such data in their state 111(d) plans. However, EPA will allow states, in limited circumstances, to submit emission inventories as part of state plans without requiring that, in all cases, that emissions data be developed for landfills below the design capacity

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[3] This includes all landfills, even those which are currently below the design capacity thresholds of 2.5 million Mg or 2.5 million m^3.

applicability thresholds noted above. See the enclosed January 27, 1997 memorandum entitled, "Emission Inventories for Existing Municipal Solid Waste (MSW) Landfills with Design Capacities below 2.5 million Mg or 2.5 million m^3" from Bruce Jordan, Director, Emission Standards Division and Robert Kellam, Acting Director, Information Transfer and Program Integration Division, OAQPS.

Q.2 When calculating the potential emissions for a MSW landfill, should 100% of the uncontrolled emissions be counted for determining the major source status? Or should only the "reasonably controllable" portion of the emissions be counted toward major source status and the remaining amount of "uncontrollable" emissions be considered fugitive emissions?

A.2 As described above, all non-fugitive emissions, i.e., those emissions which can be reasonably collected, are to be counted in determining a source's potential to emit. (Please refer to the October 21, 1994 memorandum from John Seitz.) Fugitive emissions are to be counted toward major source determinations as previously defined. (See response to Question #1.)

Q.3 It is the Department's understanding that existing landfills are generally able to achieve 75-85% collection/control efficiency and that new landfills are able to achieve collection/control efficiencies greater than 85%. If MSW landfills should not count 100% uncontrolled emissions for determining major source status, what percentage should be used?

A.3 In terms of the collection/control efficiencies which you note, please refer to the Compilation of Air Pollutant Emission Factors (commonly known as AP-42), Volume I, Chapter 2, Section 2.4.4.2. This section discusses collection efficiencies at MSW landfills.

> "Emissions from landfills are typically controlled by installing a gas collection system, and destroying the collected gas through the use of internal combustion engines, flares, or turbines. Gas collection systems are not 100 percent efficient in collecting landfill gas, so emissions of CH_4 and NMOCs at a landfill with a gas recovery system still occur. To estimate controlled emissions of CH_4, NMOCs, and other constituents in landfill gas, the collection efficiency of the system must first be estimated. *Reported collection efficiencies typically range from 60 to 85 percent, with an average of 75 percent most commonly assumed.*"

EPA anticipates revising the above-noted collection efficiencies sometime this summer. If site-specific collection efficiencies are available and properly documented, they must be used instead of the 75 percent average. In general, collection efficiencies at landfills will be determined on a case-by-case basis. If you need assistance with a site-specific example, please contact us.

If you have additional questions or need a clarification on any of the above, please feel free to contact James Topsale of my staff at (215)566-2190.

Sincerely,

Makeba A. Morris, Chief
Technical Assessment Section
Air, Radiation and Toxics Division

Enclosures (5):

1. March 8, 1994 memorandum entitled "Consideration of Fugitive Emissions in Major Source Determinations," from Lydia Wegman, Deputy Director, OAQPS.

2. August 31, 1995 Proposed Revisions to Part 70, 60 FR 45530, and 45547.

3. June 2, 1995 memorandum entitled " EPA Reconsideration of Application of Collocation Rules to Unlisted Sources of Fugitive Emissions for Purposes of Title V Permitting," from Lydia Wegman, Deputy Director, OAQPS.

4. October 21, 1994 memorandum "Classification of Emissions from Landfills for NSR Applicability Purposes," from John Seitz, Director, OAQPS.

5. January 27, 1997 memorandum entitled, "Emission Inventories for Existing Municipal Solid Waste (MSW) Landfills with Design Capacities below 2.5 million Mg or 2.5 million m^3" from Bruce Jordan, Director, Emission Standards Division and Robert Kellam, Acting Director, Information Transfer and Program Integration Division, OAQPS.

cc: L. Anderson (2344)
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A.7.15-8

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

October 21, 1994

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Classification of Emissions from Landfills for NSR Applicability Purposes

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX and X

The EPA has recently received several inquiries regarding the treatment of emissions from landfills for purposes of major NSR applicability. The specific issue raised is whether the Agency still considers landfill gas emissions which are not collected to be fugitive for NSR applicability purposes.

The EPA's NSR regulations define "fugitive emissions" to mean "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening" (40 CFR 51.165(a)(1)(x)). In general, where a facility is not subject to national standards requiring collection, the technical question of whether the emissions at a particular site could "reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening" is a factual determination to be

made by the permitting authority, on a case-by-case basis. In determining whether emissions could reasonably be collected (or if any emissions source could reasonably pass through a stack, etc.), "reasonableness" should be construed broadly. The existence of collection technology in use by other sources in the source category creates a presumption that collection is reasonable. Furthermore, in certain circumstances, the collection of emissions from a specific pollutant emitting activity can create a presumption that collection is reasonable for a similar pollutant-emitting activity, even if that activity is located within a different source category.

In 1987, EPA addressed whether landfill gas emissions should be considered as fugitive.[1] The Agency explained that for landfills constructed or proposed to be constructed with gas collection systems, the collected landfill gas would not qualify as fugitive. Also, the Agency understood at the time that, with some exceptions, landfills were not constructed with such gas collection systems. The EPA explained that "[t]he preamble to the 1980 NSR regulations characterizes nonfugitive emissions as '. . . emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings'" (see 45 FR 52693, Aug. 7, 1980).[2] Based on the "understanding that landfills are not ordinarily constructed with gas collection systems," the Agency concluded that "emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions." The Agency also made clear, however, that the applicant's decision on whether to collect emissions is not the deciding factor. Rather, it is the reviewing authority that makes the decision regarding

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[1]See memorandum entitled "Emissions from Landfills," from Gerald A. Emison, Director, Office of Air Quality Planning and Standards, to David P. Howekamp, Director, Air Management Division, Region IX, dated October 6, 1987 (attached). It is important to note that the interpretation contained in this memorandum was only applicable to landfills.

[2]In fact, the 1980 preamble language recognized the concern that sources could avoid NSR by calling emissions fugitives, even if the source could capture those emissions. The EPA's originally-proposed definition of fugitive emissions was changed in the final 1980 regulations to "ensure that sources will not discharge as fugitive emissions those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings, and will eliminate disincentives for the construction of ductwork and stacks for the collection of emissions." Id.

which emissions can reasonably be collected and therefore not considered fugitive.

The EPA believes its 1987 interpretation of the 1980 preamble may have been misunderstood, and in any case that its factual conclusions at that time are now outdated. Continued misunderstanding or application of this outdated view could discourage those constructing new landfills from utilizing otherwise environmentally- or economically-desirable gas collection and mitigation measures in order to avoid major NSR applicability.

Specifically with regard to landfill gas emissions, gas collection and mitigation technologies have evolved significantly since 1987, and use of these systems has become much more common. Increasingly, landfills are constructed or retrofitted with gas collection systems for purposes of energy recovery and in order to comply with State and Federal regulatory requirements designed to address public health and welfare concerns. In addition, EPA has proposed performance standards for new landfills under section 111(b) of the Clean Air Act and has proposed guidelines for existing landfills under section 111(d) that, when promulgated, will require gas collection systems for existing and new landfills that are above a certain size and gas production level (see 56 FR 24468, May 30, 1991). Under these requirements, EPA estimates that between 500 and 700 medium and large landfills will have to collect and control landfill gas. The EPA believes this proposal created a presumption at that time that the proposed gas collection systems, at a minimum, are reasonable for landfills that would be subject to such control under the proposal.

Thus, EPA believes it is no longer appropriate to conclude generally that landfill gas could not reasonably be collected at a proposed landfill project that does not include a gas collection system. The fact that a proposed landfill project does not include a collection system in its proposed design is not determinative of whether emissions from a landfill are fugitive. To quantify the amount of landfill gas which could otherwise be collected at a proposed landfill for NSR applicability purposes, the air pollution control authority should assume the use of a collection system which has been designed to maximize, to the greatest extent possible, the capture of air pollutants from the landfill.

In summary, the use of collection technology by other landfill sources, whether or not subject to EPA's proposed requirements or to State implementation plan or permit requirements, creates a presumption that collection of the emissions is reasonable at other similar sources. If such a system can reasonably be designed to collect the landfill's gas

emissions, then the emissions are not fugitive and should be considered in determining whether a major NSR permit is required.

Today's guidance is applicable to the construction of a new landfill or the expansion of an existing landfill beyond its currently-permitted capacity. To avoid any confusion regarding the applicability of major NSR to existing landfills, EPA does not plan to reconsider or recommend that States reconsider the major NSR status of any existing landfill based on the issues discussed in this memorandum. Also, nothing in this guidance voids or creates an exclusion from any otherwise applicable requirement under the Clean Air Act and the State implementation plan, including minor source review.

The Regional Offices should send this memorandum, including the attachment, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Mr. David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

cc: Air Branch Chief, Regions I-X
NSR Contacts, Regions I-X and Headquarters

A.7.15-12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JAN 27 1997

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Emission Inventories for Existing Municipal Solid Waste (MSW) Landfills with Design Capacities below 2.5 million Mg or 2.5 million m^3

FROM: Bruce C. Jordan, Director
Emission Standards Division (MD-13)

Robert G. Kellam, Acting Director
Information Transfer and Program Integration Division (MD-12)

TO: Regional Air Directors, Regions I-X

Introduction

The States are required to prepare and submit State plans for existing MSW landfills [landfills that have accepted waste since November 8, 1987 or have the capacity to accept future waste and are not new; i.e., not subject to 40 CFR Part 60, Subpart WWW, new source performance standards (NSPS)]. This State plan is required under 40 CFR 60, Subparts B and Cc [Emission Guidelines (EG's)]. The plan will state the requirements that existing MSW landfills will need to comply with to meet the EG's. Also, as part of the State plan, 40 CFR 60.25 requires the States to include "an inventory of all designated facilities, including emissions data for the designated pollutants." Id.

In addition to the requirement for State plans, owners and operators of MSW landfills with design capacities of less than 2.5 million Mg or 2.5 million m^3 are required to submit a design capacity report under the EG's and NSPS [40 CFR 60.752 (a), 60.757. See also, 40 CFR 60.35(c)]. However, unlike owners and operators of larger MSW landfills who must also submit a nonmethane organic compound (NMOC) emissions rate report and possibly install gas collection and controls, no additional requirements apply to landfills with design capacities of less than 2.5 million Mg or 2.5 million m^3. As noted in the preamble to the

final rule, "small landfills below 2.5 million Mg design capacity are not subject to (emission) standards under section 111 because they are not subject to controls and are not subject to emission limits," 61 FR 9905, 9912 (March 12, 1996).

Summary

In view of the limited requirements of the EG and NSPS on landfill owners and operators of MSW landfills below 2.5 million Mg or 2.5 million m^3, the Environmental Protection Agency (EPA) will allow States, in limited circumstances, to submit emission inventories as part of State plans without requiring that, in all cases, that States develop emissions data for MSW landfills below 2.5 million Mg or 2.5 million m^3 where development of such data would be unreasonable and impractical. However, where accurate data are already available, or can reasonably be generated without undue expense or effort, States should require and include such data in their State plans. Example situations of "reasonable and practical" are given below in the section, Requirements of State Plans: Emissions Data. This easing of the NMOC emission inventory requirement, however, does not relieve States of the obligation to provide, as part of their State plan, an inventory of all existing MSW landfills within the State.

The EPA believes that allowing States to provide emissions data for such MSW landfills with design capacities below 2.5 million Mg or 2.5 million m^3 only where accurate and reasonably available information can be generated, is reasonable given that the applicable NSPS and the EG simply require a design capacity report and do not require additional emissions monitoring or controls. The EPA also believes that requiring such information in all cases will either lead to the submission of inaccurate, misleading and provisional information or to additional and costly testing inconsistent with EPA's previous determination to only require design capacity reports for such landfills. [See e.g., 61 FR 9905, 9916 (March 12, 1996), which states that "The design capacity cutoff of 2.5 million Mg or 2.5 million cubic meters was chosen . . . to relieve as many small businesses and municipalities as possible from the regulatory requirements while still maintaining significant emission reduction."

This guidance memo does not, however, preclude States from including emissions information from these existing MSW landfills in their State plans and in their annual reporting of emissions to EPA if they choose to do so. As noted previously, it also does not relieve States from the requirement to provide an inventory of existing landfills in State plans.

The EPA reserves the right to request emissions information under section 114(a) of the Clean Air Act, if it determines that such information can be obtained reasonably and practically.

Requirements of State Plans: Emissions Data

In summary of the previous discussion, States need not include NMOC emissions from MSW landfills with a design capacity below 2.5 million Mg or 2.5 million m^3 from the State plan emission inventory where the estimation of these emissions is unreasonable and impractical. This section addresses specific situations of "unreasonable and impractical" and "reasonable and practical."

It may be unreasonable and impractical for an MSW landfill below 2.5 million Mg or 2.5 million m^3 to estimate NMOC emissions when a landfill is closed and there are no records of waste in place. However, States should require emissions data when it is reasonable and practical to obtain the information needed to calculate NMOC emissions, for example, when the amount of waste deposited and age of the waste can be reasonably obtained. If waste has been recently deposited such that this information would be reasonably expected to be available, then these NMOC emissions should be included in the emission inventory. Also, if a landfill has a design capacity below but close to 2.5 million Mg or 2.5 million m^3, greater consideration should be given before a decision is made to not require NMOC emissions in the emission inventory because the public may have more interest in the environmental impact of the emissions from such a landfill.

In the situation where an MSW landfill is subject to title V operating permits because it is a major source or because of another reason [e.g., subject to another NSPS or national emission standard for hazardous air pollutants (NESHAP)], this landfill should comply with the emission inventory requirement even if the landfill is below 2.5 million Mg or 2.5 million m^3 in design capacity. The reason is that emissions from title V permitted landfills must be reported under title V and thus, it would be reasonable to include these emissions estimates in the emission inventory for the State plan.

In addition to the requirement to report NMOC emissions in the State plan, 40 CFR 60.25 also requires the annual reporting of emissions by States to EPA for existing landfills whose emissions have changed more than 5 percent from the most recently submitted emissions data. For States with landfills with design capacities below 2.5 million Mg or 2.5 million m^3 for which emissions data were not initially reported, this emissions reporting requirement would not necessarily be reasonable or practical and, thus, States are not required to meet this reporting requirement for such landfills. However, where a State previously did not require emissions data for a landfill close to or at the 2.5 million Mg or 2.5 million m^3 cutoff, and there is reason to believe emissions may have increased by greater than 5 percent, a State may want to reconsider whether emissions data should be required.

The allowance for exclusion of NMOC emissions from certain landfills below 2.5 million Mg or 2.5 million m^3 from the emission inventory does not affect the requirement for States to submit an inventory of existing MSW landfills with the State plans. The 40 CFR 60.25 requires such an inventory of landfills in the State plan and this memo does not modify

this requirement. It is reasonable to expect States to know what landfills are in their geographic area and to provide this information in their State plans.

If you have any questions on this guidance, please feel free to contact Mary Ann Warner at (919) 541-1192.

cc: Patricia Bowlin, R-IX
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Ward Burns, R-VII
Jeanne Cosgrove, R-I
Mick Cote, R-VI
Renaldo Crooks, Air Resources Board, Sacramento, CA
Eric Crump, OAQPS (MD-15)
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 6 1987

MEMORANDUM

SUBJECT: Emissions from Landfills

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

TO: David P. Howekamp, Director
Air Management Division, Region IX

This is in response to your September 1, 1987, memorandum requesting clarification regarding how landfill emissions should be considered for the purpose of determining nonattainment new source review (NSR) applicability under 40 CFR 51.18.

As you are aware, a landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tons per year applicable major source cutoff for the pollutant for which the area is nonattainment. Fugitive emissions are defined in 40 CFR (j)(1)(ix) as ". . . those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Landfill emissions that could reasonably be collected and vented are therefore not considered fugitive emissions and must be included in calculating a source's potential to emit.

For various reasons (e.g., odor and public health concerns, local regulatory requirements, economic incentives), many landfills are constructed with gas collection systems. Collected landfill gas may be flared, vented to the atmosphere, or processed into useful energy end products such as high-Btu gas, steam, or electricity. In these cases, for either an existing or proposed landfill, it is clear that the collected landfill gas does <u>not</u> qualify as fugitive emissions and must be included in the source's potential to emit when calculating NSR applicability.

The preamble to the 1980 NSR regulations characterizes nonfugitive emissions as ". . . those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Although there are some exceptions, it is our understanding that landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions and are not included in the NSR applicability determination. This does not mean that the applicant's decision on whether to collect emissions is the deciding factor; in fact, the reviewing authority makes the decision on which emissions would ordinarily be collected and which therefore are not considered fugitive emissions.

It should be noted that NSR applicability is pollutant specific. Therefore, where the landfill gas is flared or otherwise combusted or processed before release to the atmosphere, it is the pollutant released which counts toward NSR applicability. As an example, landfill gas is composed mostly of volatile organic compounds, but when this gas is burned in a flare, it is the type and quantity of pollutants in the exhaust gas (e.g., nitrogen oxides and carbon monoxide) that are used in the NSR applicability determination.

If you have any questions regarding this matter, please contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

cc: Chief, Air Branch
Regions I-X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 10, 1998

MEMORANDUM

SUBJECT: Second Extension of January 25, 1995 Potential to Emit Transition Policy and Clarification of Interim Policy

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Eric V. Schaeffer, Director
Office of Regulatory Enforcement (2241A)

TO: See Addressees

This memorandum further extends the Environmental Protection Agency's (EPA) January 25, 1995 transition policy for potential to emit (PTE) limits relative to maximum achievable control technology (MACT) standards issued under section 112 of the Clean Air Act and federal operating permits issued under Title V programs. It also clarifies how the EPA's interim policy on PTE, first discussed in a January 22, 1996 memorandum, works with the transition policy.

Background

Many Clean Air Act requirements apply only to "major" sources, that is, those sources whose actual or potential emissions of air pollution exceed threshold emissions levels specified in the Act. A source's total potential to emit is determined by a two step process. First, the source's potential emissions at maximum physical capacity are established. This figure is then reduced by any recognized, practically enforceable limits on the source's emissions, such as limits on rates of production, hours of operation, and type and amount of fuel burned or materials processed. The three primary programs where PTE is a significant factor are (1) the section 112 MACT program to control emissions of hazardous air pollutants (HAPs); (2) the Title V operating permits program; and (3) the New Source Review (NSR) programs in Part C of Title I (the prevention of significant deterioration (PSD) program) and Part D of Title I (the nonattainment NSR program). These programs each contain a definition of PTE. Due to several court decisions addressing the requirement in EPA's regulatory definition of PTE under these programs that any enforceable limits on potential emissions be federally enforceable, these regulations are currently under review, and the EPA is engaged in a rulemaking process to consider amendments to the current requirements. The EPA has reviewed information provided

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through a stakeholder process and is preparing a proposed rule presenting several options related to practical and federal enforceability. Further information on options being considered is contained in January 1996 and November 1997 options papers (available on the Internet at http://www.epa.gov/ttn/oarpg/).

The Current Transition Policy

In a January 25, 1995 policy memorandum entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)," issued before the court decisions regarding the definition of PTE and federal enforceability, the EPA announced a transition policy for Section 112 and Title V (available on the Internet at http://www.epa.gov/ttn/oarpg/t5pgm.html). This transition policy alleviated concerns that some sources may face gaps in the ability to acquire federally enforceable PTE limits because of delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps would not create adverse consequences for States or for sources, the EPA provided that during a 2-year period extending from January 1995 to January 1997, for sources lacking federally enforceable limitations, State and local air regulators had the option of treating the following types of sources as non-major in their Title V programs and under section 112:

(1) sources that maintain adequate records to demonstrate that their actual emissions are less than 50 percent of the applicable major source threshold, and have continued to operate at less than 50 percent of the threshold since January 1994, and

(2) sources with actual emissions between 50-100 percent of the threshold, but which hold State-enforceable limits that are enforceable as a practical matter.

On August 27, 1996, the EPA announced an extension of the transition policy until July 31, 1998. See Memorandum entitled "Extension of January 25, 1995 Potential to Emit Transition Policy" (Aug. 27, 1996) (Internet site http://www.epa.gov/ttn/oarpg/t5pgm.html). This extension was originally based, in part, on the schedule for completing the rulemaking on the definition of PTE.

Second Extension of Transition Policy

The EPA does not expect that the PTE rulemaking which will address the PTE requirements in, among other rules, the MACT standard General Provisions (40 C.F.R. part 63, subpart A) and the Title V operating permits program, will be completed before July 1998. These rule amendments will affect federal enforceability requirements for PTE limits under these programs. Thus, there will continue to be uncertainty with respect to federally enforceable limits, and a basis for the January 25, 1995 transition policy will continue to be valid after July 31, 1998. The EPA is, therefore, extending the transition period for the MACT and Title V programs until December 31, 1999, or until the effective date of the final rule in the PTE rulemaking, whichever is sooner.

Interim Policy During Period Between D.C. Circuit Opinions and Final PTE Rule

A January 22, 1996 policy memorandum entitled "Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit" sets forth the EPA's interim policy on federal enforceability during the period prior to the effective date of a final PTE rule (available on the Internet at http://www.epa.gov//ttn/oarpg/t5pgm.html). Because there have been several inquiries into the application of the interim policy, the EPA encourages Regions, States and regulated sources to review that policy memorandum, as it still represents the EPA's position. A brief description is provided below.

Section 112: In National Mining Association v. EPA, 59 F.3d 1362 (D.C. Cir. 1995), the D.C. Circuit questioned whether the federal enforceability requirement in the General Provisions to 40 C.F.R. part 63 was "necessary." The court remanded, but did not vacate, the definition of PTE in the General Provisions. Nonetheless, as noted above, since January 25, 1995, in a policy decision prior to the National Mining opinion, the EPA has followed the transition policy regarding what limits are necessary to render a source of hazardous air pollutants a "synthetic minor" source for purposes of section 112. As discussed above, today's memorandum extends the transition policy until December 31, 1999.

Title V: In Clean Air Implementation Project v. EPA, No. 96-1224 (D.C. Cir. June 28, 1996) (CAIP), the court vacated and remanded the requirement for federal enforceability for PTE limits under 40 C.F.R. part 70. The EPA has stated that the term "federally enforceable" in section 70.2 should now be read to mean "federally enforceable or legally and practicably enforceable by a State or local air pollution control agency" pending any additional rulemaking by the EPA.

As stated in the August 1996 memorandum, the EPA interprets the court order vacating the part 70 definition as not affecting any requirement for federal enforceability in existing State rules and programs. Pending the outcome of the current rulemaking effort, the EPA believes that States are not likely to pursue submittals for program revisions. Thus, despite the State program requirements for federal enforceability, there may be States wishing to continue to observe the transition policy -- the transition policy specifically allows States to follow it in determining Title V applicability. Therefore, as stated above, the EPA is extending the transition policy as it relates to Title V permitting until December 31, 1999.

New Source Review: In Chemical Manufacturers Association v. EPA, No. 89-1514 (D.C. Cir. Sept. 15, 1995) the court remanded and vacated the federal enforceability requirement in the federal NSR/PSD rules. The EPA reiterates that neither the January 25, 1995 transition policy, the opinion in National Mining nor the court order in CAIP impacts the NSR or PSD programs. A full discussion of the EPA's policy with respect to PTE issues related to the NSR and PSD programs is presented in the January 22, 1996 policy memorandum.

In brief, that memorandum states that the court's order in Chemical Manufacturers Association did not impact the individual state rules implementing these programs that have been incorporated into EPA-approved State Implementation Plans (SIPs). Thus, the order's practical

impacts on NSR/PSD programs are not substantial for new construction -- federal enforceability is still required to create "synthetic minor" new and modified sources in most circumstances pending completion of the PTE rulemaking. The precise impact of the vacatur on NSR/PSD applicability can be definitively determined only by reviewing the applicable SIP provisions.

Distribution/Further Information

We are asking Regional Offices to send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. The Regional Office staff may contact John Walke of the Office of General Counsel at 202-260-9856; or Carol Holmes of the Office of Regulatory Enforcement at 202-564-8709. The document is also available on the Internet, at http:\\www.epa.gov\ttn\oarpg, under "OAR Policy and Guidance Information."

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Division of Air Quality, Region III
Director, Air, Pesticides, and 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
Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X
Regional Counsels, Regions I-X
Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

cc: C. Holmes (2242A)
J. Ketcham-Colwill (6103)
J. Walke (2344)
L. Hutchinson (MD12)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 20 1999

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Third Extension of January 25, 1995 Potential to Emit Transition Policy

FROM: for John S. Seitz, Director
Office of Air Quality, Planning and Standards (MD-10)

Eric V. Schaeffer, Director
Office of Regulatory Enforcement (2241A)

TO: See Addresses

This memorandum further extends the U.S. Environmental Protection Agency's (EPA) January 25, 1995 transition policy for temporarily establishing potential to emit (PTE) limits to avoid major source status under Section 112 and Title V of the Clean Air Act. This extension will continue until December 31, 2000, for all state and local air permitting agencies; it may be extended further until June 30, 2001, for those air permitting agencies that demonstrate by June 30, 2000, that an additional six months is necessary to issue limits for sources relying on the policy.

Background

In a January 25, 1995 policy memorandum entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)," EPA announced a transitional policy that provided sources a mechanism to temporarily establish synthetic minor or area source status under Title V and Section 112, respectively. (This memo is available on the Internet at http://www.epa.gov/region4/air/permits/guidance/ptememo.txt) This PTE transitional policy was originally designed to remain in effect until January 1997; however, we subsequently issued two extensions of this policy on August 27, 1996, and again on July 10, 1998. (These memos are available on the Internet at http://www.epa.gov/ttncaaa1/t5/meta/m1470.html and http://www.epa.gov/ttncaaa1/t5/meta/m5177.html, respectively).

The transition policy provides that, for sources lacking federally enforceable limitations, state and local air regulators have the option of treating the following types of sources as non-major in their Title V programs and under section 112:

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(1) sources that maintain adequate records to demonstrate that their actual emissions are less than 50 percent of the applicable major source threshold, and have continued to operate at less than 50 percent of the threshold since January 1994, [referred to as the "50 percent provision"] and

(2) sources with actual emissions between 50-100 percent of the threshold, but which hold state-enforceable limits that are enforceable as a practical matter [referred to as the "state-enforceable provision"].

Transition Policy Extension

The PTE transition policy is currently set to expire on December 31, 1999. The state-enforceable provision of the transition policy, which allows a source to rely on a practically enforceable, state-enforceable limit to restrict its PTE, will remain in effect until EPA has completed its rulemaking on the term "potential to emit."

The 50 percent provision of the transition policy, which allows a source whose actual emissions have been less than 50 percent of applicable major source thresholds since January 1994 to avoid obtaining any enforceable PTE limit, is extended until December 31, 2000. EPA does not see a good reason to tie the 50 percent provision to the promulgation of the PTE rule which deals primarily with whether enforceable limits must be enforceable by the federal government. Nonetheless, because many sources continue to rely on this portion of the transition policy, EPA is extending it one final time to allow these sources time to obtain practically enforceable federal or state limits to avoid major source status. (For specific information on the mechanisms to limit a source's PTE, please refer to the discussions in the memos referenced above).

EPA will consider extending the 50 percent provision on a case-by-case basis until June 30, 2001, for those air permitting authorities that can demonstrate to EPA why an additional six months is necessary. Information that would help in this decision making process include the number and types of sources in the state that rely on the 50 percent provision, as well as the regulatory process that would be required to provide practically enforceable limits for those sources (e.g., case-by-case permits, prohibitory rules). Permitting authorities that wish to apply for the additional six months of the extension must submit their request to EPA no later than June 30, 2000.

Importantly, sources relying on the 50 percent provision must have been maintaining, and continue to maintain, records adequately demonstrating that for every consecutive 12-month period since January 1994 and until the source has a practically enforceable limit in place, its actual emissions have not exceeded 50 percent of any and all applicable major source thresholds. Extensions of the transition policy beyond January 1997 have not relieved sources of the requirement to keep adequate records of actual emissions from January 1994 forward. Moreover, failure to comply with the requirements of the transition policy will be considered a violation of the underlying major source program.

Distribution/Further Information

We are asking Regional Offices to send this memorandum to state and local air permitting

agencies within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. The Regional Office staff may contact Lynn Hutchinson of the Office of Air Quality, Planning and Standards at (919) 541-5795, Carol Holmes of the Office of Regulatory Enforcement at (202) 564-8709, or John Walke of the Office of General Counsel at (202) 564-5699. The document is also available on the Internet, at http:\\www.epa.gov\ttn\oarpg, under "OAR Policy and Guidance Information."

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