

April 14, 1998

MEMORANDUM

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

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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

¹The 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 review is not yet complete, and is the subject of an upcoming rulemaking, the EPA has developed interim policies on this issue. The following policy memorandums describe EPA's interim policies: “Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit” (January 22, 1996) and “Extension of January 25, 1995 Potential to Emit Transition Policy” (August 27, 1996). The EPA describes the ways a State or local limit achieves “federally enforceable” status in a 1995 policy 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).

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.

²The 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

³For 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.

⁴The 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 (SO₂) may involve fuel sulfur

limits. Because those same fuel sulfur limits could possibly lead to short-term exceedances of the SO₂ 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 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	14,275 gallons of cleaning solvent and fountain solution additives 7125 gallons of cleaning solvent and fountain solution additives 3550 gallons of cleaning solvent and fountain solution additives 1425 gallons of cleaning solvent and fountain solution additives 3333 gallons of all hazardous air pollutant (HAP) containing materials 1333 gallons of material containing any one HAP
Nonheatset web offset lithography	100 tpy VOC 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	14,275 gallons of cleaning solvent and fountain solution additives 7125 gallons of cleaning solvent and fountain solution additives 3550 gallons of cleaning solvent and fountain solution additives 1425 gallons of cleaning solvent and fountain solution additives 3333 gallons of all HAP containing materials 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 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	100,000 lbs of ink, cleaning solvent, and fountain solution additives 50,000 lbs of ink, cleaning solvent, and fountain solution additives 25,000 lbs of ink, cleaning solvent, and fountain solution additives 10,000 lbs of ink, cleaning solvent, and fountain solution additives 3333 gallons of all HAP containing materials 1333 gallons of materials containing any one HAP
Screen printers	100 tpy VOC 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	14,275 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings 7,125 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings 3,550 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings 1,425 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings 3,333 gallons of all HAP-containing materials 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 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	400,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives 200,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives 100,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives 40,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives 3,333 gallons of all HAP-containing materials 1,333 gallons of materials containing any one HAP
Flexography and rotogravure -- solvent inks -- uncontrolled	100 tpy VOC 50 tpy VOC 25 tpy VOC 10 tpy VOC 25 tpy total HAP 10 tpy single HAP	100,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents 50,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents 25,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents 10,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents 3,333 gallons of all HAP-containing materials 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 not listed 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

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

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)
	25 TPY total HAPs	AND 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 SO ₂	710 million cubic feet
	50 tpy NO _x 100 tpy SO ₂	360 million cubic feet
	25 tpy NO _x 100 tpy SO ₂	180 million cubic feet
	10 tpy NO _x 100 tpy SO ₂	71 million cubic feet
DISTILLATE OIL ONLY	100 tpy NO _x 100 tpy SO ₂	<i>700,000 gallons</i>
	50 tpy NO _x 100 tpy SO ₂	<i>700,000 gallons</i>
	25 tpy NO _x 100 tpy SO ₂	<i>700,000 gallons</i>
	10 tpy NO _x 100 tpy SO ₂	<i>500,000 gallons</i>
RESIDUAL OIL ONLY	100 tpy NO _x 100 tpy SO ₂	<i>160,000 gallons</i>
	50 tpy NO _x 100 tpy SO ₂	<i>160,000 gallons</i>
	25 tpy NO _x 100 tpy SO ₂	<i>160,000 gallons</i>
	10 tpy NO _x 100 tpy SO ₂	<i>160,000 gallons</i>

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 SO ₂ 50 tpy NO _x 100 tpy SO ₂ 25 tpy NO _x 100 tpy SO ₂ 10 tpy NO _x 100 tpy SO ₂	630 million cubic feet AND 600,000 gallons distillate 320 million cubic feet and 260,000 gallons distillate 160 million cubic feet and 130,000 gallons distillate 65 million cubic feet and 52,000 gallons distillate
NATURAL GAS AND RESIDUAL OIL ONLY	100 tpy NO _x 100 tpy SO ₂ 50 tpy NO _x 100 tpy SO ₂ 25 tpy NO _x 100 tpy SO ₂ 10 tpy NO _x 100 tpy SO ₂	650 million cubic feet and <i>160,000 gallons residual</i> 300 million cubic feet and <i>160,000 gallons residual</i> 150 million cubic feet and <i>160,000 gallons residual</i> 51 million cubic feet and <i>51,000 gallons residual</i>
NATURAL GAS, RESIDUAL AND DISTILLATE	100 tpy NO _x 100 tpy SO ₂ 50 tpy NO _x 100 tpy SO ₂ 25 tpy NO _x 100 tpy SO ₂ 10 tpy NO _x 100 tpy SO ₂	650 million cubic feet and <i>160,000 gallons residual</i> 300 million cubic feet and <i>160,000 gallons residual</i> 150 million cubic feet and <i>160,000 gallons residual</i> 51 million cubic feet and <i>51,000 gallons residual</i>

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 SO₂ 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 SO₂ emissions.

Table 8. Guidance For Hot Mix Asphalt Plants

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

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

(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 SO₂.