

October 15, 1993

MEMORANDUM

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

FROM: 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 be 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

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.

**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

Table 1  
**MONTHLY EMISSIONS RECORD<sup>1</sup>**

Plant Name \_\_\_\_\_  
Address \_\_\_\_\_

Report for (month/ year)  
Report Date (day/month/year)

POTENTIAL EMISSIONS <sup>2</sup>						
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]					
<b>TOTALS</b>	650	4.2	900	5.4	2100	12.6

Table 2

<sup>1</sup> 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.

<sup>2</sup> Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

## EMISSIONS WORKSHEET FOR MINOR VOC AND HAP SOURCES<sup>3,4</sup>

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

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<sup>3</sup> Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

<sup>4</sup> Separate worksheet (table 1) required for each paint or solvent used.



## EMISSIONS WORKSHEET FOR MINOR VOC AND HAP SOURCES <sup>5,6</sup>

Plant Name \_\_\_\_\_  
Address \_\_\_\_\_

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

Paint/ Solvent	Usage Totals (gallons)												12 Month Total
	Month												
	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													

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<sup>1</sup> Assumes all VOC and HAPs in paint or solvent are released into the atmosphere.

<sup>6</sup> Separate worksheet (table 1) required for each paint or solvent used.