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**Category:** 30 – Test Methods

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: July 10, 1978

SUBJECT: Procedures for Measuring Volatile Organic Compounds

FROM: Richard G. Rhoads, Director  
Control Programs Development Division

TO: Robert L. Duprey, Director  
Air and Hazardous Materials Division, Region V

In response to your memorandum of May 25, 1978, members of my staff have contacted George Walsh of the Emission Measurement Branch of ESED concerning the status of test procedures for measuring VOC emissions from facilities with add-on control devices. Such procedures have been completed but are in the process of being tested. Formal adoption of the procedures is anticipated in early September, 1978.

Any State wishing to do so may develop regulations based on those test procedures if time enough will remain after early September to formally adopt the regulations and procedures. George is in the process of writing a memorandum to you which will explain the conceptual basis of the testing procedures.

It is assumed that some States have previously developed test procedures for measuring VOC. Approaches for developing such procedures were published in Section 5 of "Control of Volatile Organic Compound Emissions from Existing Stationary Sources - Volume I; Control Methods for Surface - Coating Operations" (EPA 450/2-76-028, OAQPS No. 1.2-067) in November 1976. State developed procedures may be used if determined to be consistent with the approaches in the foregoing document.

The final version of our policy concerning test methods states: "Where technically feasible, the SIP revision must include . . . specifically designated method(s) for each emission limitation. . ." This policy appears on page 222 of the April 1978 edition of the nonattainment area workshop manual. If neither of the alternatives discussed above are appropriate, it is doubtful that it is technically feasible to develop procedures in the time remaining before the January, 1979, submittal date. In such an instance, regulations that "loosely" specify test procedures are preferable to no regulations at all.

Please feel free to contact me if further clarification on this issue is necessary.

cc: E. Reich  
G. Walsh  
Director, Air & Hazardous Materials Division, Regions I, III, IV, VI-X  
Director, Environmental Programs Division, Region II  
J. McDonald

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: July 25, 1978

SUBJECT: Test Methods and Procedures for Volatile Organic Compounds

FROM: Robert L. Duprey, Director  
Air and Hazardous Materials Division

TO: Richard G. Rhoads, Director  
Control Programs Development Division

Through a contractor, the Air Programs Branch of the Air and Hazardous Materials Division, Region V, has drafted sample regulations for the first 15 Reasonably Available Control Technology (RACT) source categories. Copies of the draft were distributed to the state agencies at a recent workshop in Chicago and were the subject of considerable discussion and comments.

A key area of discussion and controversy was the lack of approved test procedures for volatile organic compounds (VOC). While control technology guidelines provide for determination of volatile content in surface coatings, they do not provide test methods or procedures for VOC emissions from sources which install add-on control devices. The Enforcement Division specifies that "if a state fails to submit appropriate test methods and procedures for their regulations, the United States Environmental Protection Agency will disapprove that portion of their plan unless methods and procedures in part 60 are appropriate and can be utilized." A copy of Enforcement Division's position is enclosed herewith.

Air Programs Branch is, therefore, requesting your assistance and expertise in developing adequate testing procedures to enable the states to expedite their state implementation plans as early as possible. Response to this request may be forwarded to Lino Castanares of my staff who can be reached at (312) 353-2205.

Thank you.

Enclosure

## Enclosure

In determining whether a SIP is enforceable, the emission limiting and other regulatory parts of each plan will be reviewed for clarity and specificity. EPA will consider in this review such questions as whether emission limitations and other controlling terms are well defined; whether it is clear who is being regulated and whether the dates on which actions are required to be taken are clearly stated.

### SIP Revision Requirements - Test Methods

Many State implementation plans (SIPs) as originally submitted did not adequately prescribe the test methods which would be used when determining compliance with the emission limitations adopted by the States. Compliance determinations and enforcement proceedings made apparent that this weakness existed in some SIPs. To correct this deficiency, EPA promulgated in section 52.12(c) a requirement which states that,

"(S)ources subject to plan provisions which do not specify a test procedure and sources subject to provisions promulgated by the Administrator will be tested by means of the appropriate procedures and methods prescribed in Part 60 of this chapter unless otherwise specified in this Part."

This does not solve all the problems which arise when a State fails to designate a specific test method. A source category could be regulated under a SIP for which none of the procedures and methods promulgated in Part 60 would be appropriate.

Another problem which has arisen, deals with the specificity of the emission limitation. While a certain regulation may apply to a specific source category or group of categories (process weight), it is often difficult to ascertain the scope of the requirement. For example, does the emission limit apply only to the stack emissions, or are the fugitive emissions and stack emissions combined in order to determine compliance? A specific emission limit and test method that applied to it will help to clarify how compliance is to be determined.

For these reasons, it is essential that when developing emission limitations, each requirement must specify the appropriate test method and how compliance is to be determined. Since so much SIP analysis depends on an accurate interpretation of the emission limitation and its associated test method, it is extremely important that a clear understanding of both be realized.

Test methods which are included with SIPs should be evaluated to determine their accuracy and consistency. States are encouraged to use EPA reference methods whenever possible.

Another option which states should be encouraged to pursue is the utilization of continuous monitors as the reference or compliance test method. It is EPA's intent to require, in addition to the four source categories now covered in appendix P, additional sources to install continuous monitors. Attainment and maintenance of NAAQS require that sources continuously operate

their control equipment in a satisfactory manner. To maintain such compliance, an effective way to insure this would be to utilize continuous monitors as the compliance method thus providing continuous compliance data which can be used in an appropriate enforcement action. Therefore, the SIP revision must include the following:

- 1) Legally enforceable emission limitations, with associated tests methods specifically designated (Any language which leaves the test method completely to the discretion of the Air Pollution Control Officer is unacceptable. Minor changes to designated test methods would be approvable, however).
- 2) Sufficient specificity in the regulation to define exactly what emission points the regulation covers.
- 3) Sufficient description of the applicable test methods in order to evaluate their accuracy and also to analyze the associated emission limit in order to assess the stringency of the emission limit and its impact on attainment. States that use Part 60 methods and procedures will not be required to submit additional documentation.
- 4) The establishment of conversion factors or other parameters and the monitoring of these parameters which will transform test data into units of the applicable standard.
- 5) The procedures which will be used to conduct the test. (c.s. Does a test consist of the average of three one-hour runs? etc.).

If a State fails to submit appropriate test methods and procedures for their regulations, EPA will disapprove that portion of their plan unless methods and procedures in Part 60 are appropriate and can be utilized.