

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Manning and Standards  
Research Triangle Park, North Carolina 27711  
JAN 20 1984

MEMORANDUM

SUBJECT: Averaging Times for Compliance  
With VOC Emission Limits - SIP Revision Policy

FROM: John R. O'Connor, Acting Director  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air and Waste Planning Division  
Regions 11-IV, VI-VIII, X  
Director, Air Management Division, Regions 1, V, IX

The purpose of this memorandum is to clarify the Agency's policy regarding emission time averaging for existing sources of volatile organic compounds (VOC's). Numerous State Implementation Plan (SIP) revisions, both broad regulations and source-specific changes, have been submitted which provide for compliance determinations by time averaging" emissions of VOC for periods exceeding 24 hours. These requests and the following policy on this subject were discussed extensively at a recent meeting attended by those Regional Offices which have the most pending actions (Regions 1, III, IV, V); the Office of Air Quality Planning and Standards; and the Office of General Counsel. This policy represents the consensus of the meeting attendees.

The objective of EPA's national VOC emissions control program is the timely attainment and maintenance of the national ambient air quality standard (NAAQS) for ozone. SIP revisions and other regulatory actions relating to VOC control must maintain the integrity of this basic objective. There should be assurances that VOC emission control is reasonably consistent with protecting this short-term ozone standard. Further, since SIP's and associated VOC control programs contemplate the actual application of reasonably available control technology (RACT), regulatory actions that incorporate longer term averages to circumvent the installation of overall RACT level controls cannot be allowed.

Current Agency guidance specifies the use of a daily weighted average for VOC regulations as the preferred alternative where continuous compliance is not feasible. An example might be where a facility operates in a batch manner with multiple lines and various products. Reference is made to the December 8, 1980. Federal Register (copy attached) where can coating operators are all allowed to -bubble- several production lines and average emissions over a 24-hour time period.

The preferred daily weighted average alternative may not be feasible in all cases. Where the source operations are such that daily emissions cannot be determined or where the application of RACT for each emission point (line, machine, etc.) is not economically or technically feasible on a daily basis, longer averaging times can be permitted under certain conditions. In determining feasibility, consideration might be given, for example, to the extent to which modifications can be made to testing, inventory, or record keeping practices in order to quantify daily emissions. Also, variability or lack of predictability in a source's daily operation might be considered as well as availability of control technology or the physical impediment or restriction to control equipment installation. In order to allow longer than daily averaging in SIP regulations, the following conditions or principles must be honored:

1. Real reductions in actual emissions must be achieved, consistent with the RACT levels specified in SIP's or the control technique guidelines (CTG's). These limits are typically expressed in terms of VOC per unit of production (a qualitative such as lbs VOC/gal coating). Where it is not feasible to specify emission limits in such terms, emission limits per unit of time can be approved provided that:
  - a. The emission limits reflect typical (rather than potential or allowable) production rate and operating hours. These emission limits must truly reflect emissions reductions consistent with RACT and are not simply an artificial constraint on potential emissions. This must be supported in the SIP revision by historical production and operation data.
  - b. Nonproduction or equipment downtime credits are not allowed in the emission limit calculation unless a Federally enforceable document specifically restricts operation during these times. Such credit must be based on real, historical emissions.
2. Averaging periods must be as short as practicable and in no case longer than 30 days.
3. A demonstration must be made that the use of long-term averaging (greater than 24-hour averaging) will not jeopardize either ambient standards attainment or the reasonable further progress (RFP) plan for the area. This must be accomplished by showing

that the maximum daily increase in emissions associated with long-term averaging is consistent with the approved ozone SIP for the area.

4. Sources in areas lacking approved SIP's, or in areas with 'approved SIP's but showing measured violations, cannot be considered for longer term averages until the SIP has been revised demonstrating ambient standards attainment and maintenance of RFP (reflecting the maximum daily emissions from the source with long-term averaging).

Meaningful short-term (i.e., daily) emission caps are desirable especially for sources subject to large fluctuations in emissions. The use of a daily cap (equal to or less than current average emissions on a daily basis) that limits short-term emissions to RACT equivalent levels would meet the above objective of ensuring VOC control that is consistent with attaining the MARS for ozone.

States have the primary responsibility to show adherence to the above principles and, to do so, must include the following information (in detail) in all SIP revision requests that seek VOC averaging times greater than 24 hours:

1. The VOC limits specified in an enforceable form with appropriate compliance dates.
2. A description of the affected processes and associated historical production and operating rates.
3. A description of the control techniques to be applied to the affected processes such as low solvent and waterborne coating; technology and/or add-on controls.
4. The nature of the emission control program whether a bubble, a regulation change, a compliance schedule, or some other form of alternative control program.
5. The method of record keeping and reporting to be employed to demonstrate compliance with the new emission limit requirement and to support the showing that the emission limit is consistent with RFP and the demonstration of attainment.

Each EPA Regional Office shall have the primary responsibility for determining the approvability of application requests. However, in order to assure Regional consistency, coordination with the Office of Air Quality Planning and Standards staff is encouraged during the initial development of any single 'time average' SIP revision or regulation. Also, all SIP revisions involving long-term averaging must be proposed in the Federal Register with an explanation of how the principles listed above have been satisfied.

Should there be any questions on this policy. please call Tom Helms (FTS 629-5526) or Brock Nicholson (FTS 629-5516).

Attachment

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