

United States Environmental Protection Agency, Region IX

Air & Toxics Division

Technical Support Document

for

EPA's Notice of Proposed Rulemaking

for the

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California State Implementation Plan

South Coast Air Quality Management District

Rule 1173

Fugitive Emissions of Volatile Organic Compounds

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Agency Name: South Coast Air Quality Management District (SCAQMD)

Submitted Rule Number: 1173

Rule Title: Fugitive Emissions of Volatile Organic Compounds

Submittal Date: May 24, 1994

District Adoption Date: May 13, 1994

Background:

The previous version of Rule 1173, adopted December 7, 1990, was given a limited approval and limited disapproval on October 26, 1992. The notice of final rulemaking was published in 57 FR 48457.

Summary of Rule Changes:

This new submittal corrects previously identified deficiencies which resulted in Rule 1173 receiving a limited approval/limited disapproval.

- Executive Officer discretion in approving alternate test methods has been removed from section (h)(2);
- section (k)(1) has been clarified so that unsafe components will not be exempt from repair requirements;
- the definition of "inaccessible component" has been changed to be consistent with the CTG definition.

Rule Evaluation and Proposed Action:

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I. Evaluation

This rule was evaluated against the following Control Technique Guideline (CTG) documents: "Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants," EPA-450/3-83-007. The control provisions in this CTG document are the presumptive norm for reasonably available control technology (RACT). The rule was also evaluated against "Model Volatile Organic Compound Rules for Reasonably Available Control Technology", Office of Air Quality Planning and Standards, June 1992, and the document entitled "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations: Clarification to Appendix D of November 24, 1987 Federal Register", May 25, 1988.

Strengthening Areas

Rule 1176 has been strengthened and clarified by the correction of previously identified deficiencies, including Executive Officer discretion in approving alternate test methods.

Appendix D/RACT Deficiencies

No Appendix D/RACT deficiencies are noted.

Other Areas

The following issues are not considered significant enough to affect the approvability of this rule, but they should be addressed in the next rule revision.

a) The definition of "commercial natural gas" incorrectly references section (g)(2). The proper reference is (h)(2).

b) The definition of "VOC" and "exempt compound" does not exempt ethane, which EPA has determined to be non-photoreactive and/or exempt. If the District wishes to regulate this exempt compound, EPA considers this more stringent approach acceptable as long as the District does not claim control of these compounds as emission reduction credits.

c) For clarity, the term "audio-visual inspection" in section (e)(1) should be defined.

d) The rule could be strengthened and clarified if a control device efficiency requirement and test method were specified in section (f)(3).

e) The rule could be strengthened if section (g) required dated records of all inspections, and not just records of leaks.

f) Section (h)(1) refers to measurements taken at a distance of one centimeter from the potential leak source. It is recommended that the reference to this one centimeter distance be deleted. Experience has shown that significant dilution and capture losses can occur within this spacing, and therefore, EPA prefers to use guidelines consistent with those described in EPA Reference Method 21 which, for most components, call for placement of the probe inlet "at the surface of the component interface where leakage could occur."

g) The rule could be strengthened if the components listed in section (k) were not exempt from repair requirements. Also, to be consistent with the ARB RACT guidance (September 3, 1993; ARB/SSD-93-002), (k)(4) should not exempt components at gas processing plants. It is understood, however, that the District wishes to control ethane as a VOC, and therefore fluid streams with a VOC concentration of 10% or less (including ethane) are being exempt, as opposed to 1% or less (excluding ethane) as recommended by the CTG.

2. Net Effect on Emissions

No effect on emissions is expected from this rule revision since most of the changes were of an administrative nature.

3. Proposed Action

EPA is proposing to approve SCAQMD Rule 1173 under section 110(k) as meeting the requirements of section 110(a) and Part D of the Clean Air Act as amended in 1990.

Attachments:

1. SCAQMD Rule 1173, adopted May 13, 1994.
2. SCAQMD Rule 1176, adopted December 7, 1990.