

Technical Support Document
for
EPA's Notice of Direct Final Rulemaking

on revisions to the
California State Implementation Plan

as submitted by the State of California, Air Resources Board
for the San Joaquin Valley Unified Air Pollution Control District

EPA's Analysis of
San Joaquin Valley Unified Air Pollution Control District's
Rule 4403, Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas
Production Facilities and Components at Natural Gas Processing Facilities

United States Environmental Protection Agency, Region IX
Air Division

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**San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD),
Rule 4403, Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas
Production Facilities and Components at Natural Gas Processing Facilities**

Chronology of SJVUAPCD Adoption, Air Resources Board Submittal, and EPA Actions

- The San Joaquin Valley Unified Air Pollution Control District Governing Board adopted and amended Rule 4403 on April 20, 2005.
- The State of California submitted Rule 4403 to EPA on July 15, 2005 as a revision to the California State Implementation Plan (SIP).
- On August 18, 2005, EPA found complete CARB's July 15, 2005 submittal of Rule 4403.

EPA approved into the SIP a prior version of Rule 4403 (see 61 *Federal Register* (FR) 3579, February 1, 1996.) This version of Rule 4403 was adopted by the SJVUAPCD Governing Board on February 16, 1995.

Rule Summary

San Joaquin Valley Unified Air Pollution Control District Rule 4403, Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Production Facilities and Components at Natural Gas Processing Facilities is a rule designed to reduce fugitive volatile organic compound (VOCs) emissions at these industrial sites. VOCs are emitted from various production components such as valves, flanges, pipes, pumps, and compressors. Rule 4403 established inspection, tagging, and repair requirements along with test methods and recordkeeping provisions to determine compliance.

Rule Evaluation

1. Statutory Requirements & EPA Guidance

In section 182(a)(2)(A) of the Clean Air Act Amendments of 1990 (CAA), Congress required that nonattainment areas, such as SJVUAPCD, fix their deficient reasonably available control technology (RACT) rules for VOCs and established a May 15, 1991 deadline for states to submit corrections of those deficiencies. The CAA requires the SJVUAPCD to adopt and correct RACT rules pursuant to pre-amended (the Clean Air Act prior to its 1990 amendment) section 172(b) as interpreted in pre-amendment guidance. This guidance included the following document:

- "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations," USEPA, May 28, 1988.

Also, Rule 4403 must comply with the following Control Techniques Guideline (CTG):

- "Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants," EPA-450/3-83-007, USEPA, December 1983.

Because a previous version of Rule 4403 is part of the SIP, EPA must ensure that this most recent version of Rule 4403, adopted April 20, 2005, is consistent with Section 110(l) of the CAA. According to Section 110(l), EPA may not approve a SIP revision if that SIP revision interferes with any statutory requirements concerning reasonable further progress (RFP) towards or attainment of the National Ambient Air Quality Standards (NAAQS), or any other applicable requirement of the CAA. In this case, EPA must review the April 20, 2005 version of Rule 4403 and compare it with the 1996 SIP-approved version. In particular, EPA cannot approve a rule if a rescission, delayed implementation of a SIP-approved rule, or adoption of emission limits that are less stringent than the SIP-approved rule interferes with RFP and attainment of the NAAQS.

2. Evaluation of Rule

SJVUAPCD's April 20, 2005 amendments to Rule 4403 included these significant changes to the 1995 version within the SIP.

- The provisions of Rule 4403 will expire on April 20, 2006.

To conclude this evaluation, Rule 4403's limits, requirements, and work practices conform with the EPA's CTG and remain unchanged compared to the SIP version of the rule. Also, Rule 4403 contains adequate record keeping and test methods provisions for monitoring the compliance of regulated facilities.

2.a. Section 110(l) Requirements.

EPA must compare the April 20, 2005 version of Rule 4403 with the 1996 SIP-approved version. In particular, EPA cannot approve a rule if a rescission, delayed implementation of a SIP-approved rule, or adoption of emission limits that are less stringent than the SIP-approved rule interfere with RFP and attainment of the NAAQS.

SJVUAPCD's lone amendment removes Rule 4403 from enforcement. However, SJVUAPCD has submitted and we are proposing to approve Rule 4409. We find that SJVUAPCD Rule 4409 effectively replaces and does not weaken the existing requirements in the SIP represented by SJVUAPCD Rule 4403. Rule 4409 maintains or improves upon the provisions of Rule 4403. Compared to Rule 4403, Rule 4409 has the following attributes: more stringent requirements concerning allowable leak concentrations, allowable leak rates, and component repair periods; fewer exemptions; added replacement and retrofit requirements; and, updated test methods for determining compliance. Where Rule 4409 does not improve upon Rule 4403 requirements, it maintains them.

3. Recommendations for Future Revisions.

We have no recommendations.

4. Rule Deficiencies

There are no deficiencies in Rule 4403 providing cause for EPA to propose either a full, or limited disapproval of the rule. SJVUAPCD's submittal of Rule 4409 satisfies our Section 110(l) SIP amendment issues concerning the future expiration of Rule 4403.

Recommendation

Section 110(k) of the CAA contains provisions governing EPA's review of plans and regulations submitted by State of California, air districts, and localities for inclusion in the California State Implementation Plan. EPA can propose one of four actions on Rule 4403: full approval, conditional approval, limited approval/disapproval, or a full disapproval.

Rule 4403 contains no appendix D/RACT deficiencies and fulfills the RACT requirements of CAA section 182(a)(2)(A), section 110(l), and our enforceability requirements.

In conclusion, EPA proposes a full approval of the April 20, 2005 adopted version of SJVUAPCD's Rule 4403 - Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Drains at Petroleum Refineries and Chemical Plants and its inclusion into the California State Implementation Plan.

Attachments

Change copy of SJVUAPCD, Rule 4403 - Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Production Facilities and Components at Natural Gas Processing Facilities, adopted April 20, 2005.

SJVUAPCD, Rule 4403 - Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Production Facilities and Components at Natural Gas Processing Facilities, adopted April 20, 2005.

"Issues Relating to VOC (Volatile Organic Compound) Regulation Cutpoints, Deficiencies, and Deviations," USEPA, May 28, 1988, cover piece only.

"Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants," EPA-450/3-83-007, USEPA, December 1983, cover piece only.

"Final Staff Report: Proposed Amendments to Rule 4403 - Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Production Facilities and Components at Natural Gas Processing Facilities, Rule 4409..., Rule 4451..., Rule 4452..., and Rule 4455..., " April 20, 2005, SJVUAPCD; without Appendices A-E; please see attachments to Rule 4455 TSD within this docket.