

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 South Coast Air Quality Management District

EPA's Analysis of
South Coast Air Quality Management District's
Rule 1118, Control of Emissions from Refinery Flares

United States Environmental Protection Agency, Region IX
Air Division

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**South Coast Air Quality Management District (SCAQMD),
Rule 1118, Control of Emissions from Refinery Flares**

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

- The South Coast Air Quality Management District Governing Board adopted Rule 1118 on November 4, 2005.
- On October 5, 2006, the State of California submitted Rule 1118 to EPA as a revision to the California State Implementation Plan (SIP).
- EPA found California's submittal of Rule 1118 complete on October 24, 2006.

EPA has not reviewed and approved into the SIP any prior version of Rule 1118.

Rule Summary

South Coast Air Quality Management District Rule 1118 - Control of Emissions from Refinery Flares is designed to decrease volatile organic compound (VOC), sulphur dioxide and nitrogen dioxide emissions from industries such as petroleum refineries, sulphur recovery plants, and hydrogen production plants. The rule also provides for monitoring and recording data related to flaring operations and flare related emissions.

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 SCAQMD, 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 SCAQMD 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.

There is no set of Control Technique Guidelines for controlling emissions from refinery flares.

1.a. Anti-Backsliding Requirements and Findings (CAA § 110(l)) and (CAA § 193).

Section 110(l) of the CAA states that “[t]he Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in CAA § 171), or any other applicable requirement of this chapter.” In particular, EPA cannot approve a rescission, delayed implementation of a SIP-approved rule, or adoption of emission limits less stringent than the SIP-approved rule that would

interfere with reasonable further progress (RFP) toward or attainment of the NAAQS. EPA must ensure that Rule 1118, adopted November 4, 2005 is consistent with Section 110(l) of the CAA. In particular, EPA cannot approve a rule incorporating a rescission, delayed implementation of a SIP-approved rule, or adoption of emission limits that are less stringent than the SIP-approved rule.

Had Rule 1118 been adopted into the SIP before enactment of the CAA, Section 193 would also apply. Section 193 or the "Savings Clause", states that "[n]o control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before November 15, 1990, in any area which is a nonattainment area for any air pollutant may be modified after November 15, 1990, in any manner unless the modification insures equivalent or greater emission reductions of such air pollutant."

2. Evaluation of Rule

Rule 1118 includes the following general provisions:

- purpose and applicability;
- definitions of terms used within the rule;
- exemptions from the rule;
- requirements for minimizing flare emissions with the exception of shutdown, startup, emergencies, process upset, or essential operational needs;
- performance targets for minimizing SO_x emissions;
- requirements for flare minimization plans if SO_x targets are exceeded;
- requirements for flare monitoring and recording plans;
- requirements for flare operation monitoring and recording;
- record keeping to demonstrate compliance with the rule;
- notification and reporting requirements concerning planned and unplanned flare events;
- test methods for determining compliance with the rule; and,
- exemptions from the rule.

Rule 1118's requirements are consistent with other California air district rules designed to minimize flaring, monitor flaring activity, and collect data regulating flare operations. The rule contains adequate record keeping and test methods provisions for monitoring the compliance of regulated facilities. Rule 1118 strengthens the SIP by reducing VOC emissions at sources that have been uncontrolled and collects information that may lead to reduced flaring at affected facilities. Consequently, we find that Rule 1118 will not interfere with attainment of the National Ambient Air Quality Standards (NAAQS) and is consistent with Section 110(l) of the CAA.

3. Recommendations for Future Revisions

EPA has no recommended changes for future revisions of Rule 1118.

4. Rule Deficiencies

There are no deficiencies in Rule 1118 providing cause for EPA to propose either a limited approval/disapproval, or full disapproval of the rule.

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 1118: full approval, conditional approval, limited approval/disapproval, or a full disapproval.

Rule 1118 contains no appendix D/RACT deficiencies, and fulfills the RACT requirements of CAA section 182(a)(2)(A). The emission limits are low and are consistent with similar requirements in the state. The rule contains adequate record keeping and test method provisions to monitor the compliance status of the regulated facilities. We find that the rule does not jeopardize reasonable further progress or attainment of the ozone NAAQS.

In conclusion, EPA proposes approval of the November 4, 2005 adopted version of Rule 1118 and inclusion into the California State Implementation Plan.

Attachments

1. SCAQMD, Rule 1118 - Control of Emissions from Refinery Flares, adopted November 4, 2005.
2. "Issues Relating to VOC (Volatile Organic Compound) Regulation Cutpoints, Deficiencies, and Deviations," USEPA, May 28, 1988, cover piece only.
3. "Final Staff Report for Proposed Amendments to Rule 1118 - Control of Emissions from Refinery Flares," South Coast Air Quality Management District, October 2005. Chapters I-VI only.