



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2012-0359; FRL-9732-5]

Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is finalizing approval of revisions to the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) portion of the California State Implementation Plan (SIP). This action was proposed in the Federal Register on June 13, 2012 and concerns volatile organic compound (VOC) emissions from crude oil production sumps and refinery wastewater separators. We are approving local rules that regulate these emission sources under the Clean Air Act (CAA or the Act).

DATES: These rules will be effective on [Insert date 30 days from the date of publication in the Federal Register].

ADDRESSES: EPA has established docket number EPA-R09-OAR-2012-0359 for this action. Generally, documents in the docket for this action are available electronically at <http://www.regulations.gov> or in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed at <http://www.regulations.gov>, some

information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps, multi-volume reports), and some may not be available in either location (e.g., confidential business information (CBI)). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Nicole Law, EPA Region IX, (415) 947-4126, law.nicole@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

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I. Proposed Action

On June 13, 2012 (77 FR 35329), EPA proposed to approve the following rules into the California SIP.

Local Agency	Rule #	Rule Title	Amended	Submitted
SJVUAPC D	4402	Crude Oil Production Sumps	12/15/11	02/23/12
SJUVAPC D	4625	Wastewater Separators	12/15/11	02/23/12

Local Agency	Rule #	Rule Title	Amended	Submitted

We proposed to approve these rules because we determined that they comply with the relevant CAA requirements. Our proposed action contains more information on the rules and our evaluation.

II. Public Comments and EPA Responses

EPA's proposed action provided a 30-day public comment period. During this period, we received comments from the following party.

1. Adenike Adeyeye, Earthjustice; letter dated July 13, 2012 and received July 13, 2012.

The comments and our responses are summarized below.

Comment #1: Earthjustice stated that Rule 4402 continues to include limits that are less stringent than those in other California districts. Specifically, the SJVUAPCD defines clean produced water as water with a VOC concentration of 35 mg/L or less while other California districts such as South Coast Air Quality Management District (SCAQMD) limit the VOC concentration in wastewater to 5 mg/L. Earthjustice provided more detailed arguments supporting a 5 mg/L limit in Rule 4402 in comments 2-4

below.

Response #1: As explained in our technical support document (TSD) accompanying the proposed action, sources in the SCAQMD have greater options for disposal of the produced water than sources in the SJVUAPCD. Specifically, produced water in the SCAQMD can be disposed of into the sanitary sewer or reinjected into the ground without processing to meet a 5 mg/L VOC limit. Discussions with the California Department of Oil, Gas, and Geothermal Resources confirmed that in the Ventura County Air Pollution Control District (VCAPCD) there is no VOC concentration limit for reinjection¹ and the Los Angeles County Sanitation District confirmed the VOC concentration limits for wastewater discharged into a municipal sewage system are above SJVUAPCD's 35 mg/L limit.² See also response to comments 2-4 below.

Comment #2: Earthjustice stated that SJVUAPCD's assertion that wastewater is not treated in SCAQMD is false and that EPA did not confirm SJVUAPCD's claim. EPA's TSD states that oil production facilities in SCAQMD can dispose of their wastewater in sanitary sewage systems or existing injection wells, but did not confirm that operators use non-treatment disposal options.

1 Phone conversation with Steve Fields (California Department of Oil, Gas, and Geothermal Resources), August 1, 2012.

2 Phone conversation with Kai Kuo (Los Angeles County Sanitation District), August 3, 2012.

Earthjustice has confirmed with SCAQMD staff that operators can and do comply with the 5 mg/L limit through wastewater treatment, in addition to wastewater disposal via injection wells and municipal sewer systems.

Response #2: Most SCAQMD operators treat their wastewater to meet standards of the sanitation district or standards for reinjection, which are less stringent than the 5 mg/L VOC limit.^{3,4} For example, the Los Angeles County Sanitation District allows wastewater with 60 - 75 mg/L of non-polar oil and grease to be discharged into the sewer system from oil field producers.⁵ Staff at Ventura County APCD similarly explained that 90-95% of the oil production facilities in VCAPCD do not treat the wastewater but instead transfer it to wastewater treatment facilities or reinject the wastewater into the ground.⁶ For reinjection, the fluid deposited back into the ground does not need to meet any VOC concentration limits.⁷ EPA's discussion with SCAQMD staff confirmed that a few operators in SCAQMD are able to meet the 5 mg/L VOC limit in the wastewater without any treatment other than gravity separation. However, SCAQMD staff

3 Phone conversation with Victor Juan (SCAQMD), July 31, 2012 and April 26, 2012.

4 Phone conversation with Eugen Teszler (SCAQMD). August 2, 2012.

5 Phone conversation with Kai Kuo (Los Angeles County Sanitation District), August 3, 2012.

6 Phone conversation with Eric Wetherbee (VCAPCD), July 31, 2012.

7 Phone conversation with Steve Fields (California Department of Oil, Gas and Geothermal Resources), August 1, 2012.

also noted that properties of wastewater (including VOC content) vary widely with the geological properties of the oil wells and the fact that a few SCAQMD operators can meet 5 mg/L with only gravity separation does not mean that all wells subject to SCAQMD Rule 1176, much less all wells subject to SJVUAPCD Rule 4402, can do the same.⁸ Thus, we have no evidence that oil producers in Los Angeles routinely treat their wastewater to 5 mg/L.

Comment #3: Earthjustice stated that EPA did not confirm that wastewater treatment technologies are too expensive to be used to comply with the 5 mg/L limit. Earthjustice confirmed with SCAQMD staff that wastewater treatment can be a more cost effective option. Operators in SCAQMD use Wemco® units as well as filters and other technologies to treat wastewater. The treatment methods have been found to be cost-effective in 1989. An analysis that explains why SJVUAPCD operators cannot adopt similar treatment is absent from EPA's TSD and SJVUAPCD's staff report.

Response #3: EPA reviewed materials related to the adoption of SCAQMD Rule 1176 in 1989 and found that in fact the cost effectiveness of treating produced water to a 5 mg/L VOC limit was not analyzed. Rather, the costs evaluated in the 1989 SCAQMD

⁸ Phone conversation with Victor Juan (SCAQMD), July 31, 2012.

staff report related to the installation of covers on secondary and tertiary sumps and ranged from an average of \$8,000 to \$18,900 per ton of VOC reduced respectively.⁹ Since secondary and tertiary sumps generally contain liquid with much higher VOC content than a clean produced water pond, installing a cover on a clean produced water pond would have much higher cost per ton of VOC reduced. Additionally, as mentioned in our response to comment 2 above, SCAQMD staff have confirmed to EPA that many operators in SCAQMD do not treat their wastewater to the 5 mg/L limit; rather these operators typically dispose of wastewater in the sanitary sewage system and are required to meet a 60 mg/L oil and grease limit for the Los Angeles County Sanitation District or dispose of wastewater through reinjection and are not required to meet any VOC concentration limits.^{10,11}

In addition, we note that SJVUAPCD's staff report, which was prepared as part of the District's adoption of Rule 4402, includes a cost effectiveness analysis at Appendix B, Section II, Analysis of Clean Produced Water Compliance Options. The District's analysis describes the types of control technology

9 SCAQMD Staff Report Proposed Rule 1176 Sumps and Wastewater Separators September 20, 1989.

10 Phone conversation with Kai Kuo (Los Angeles County Sanitation District), August 3, 2012.

11 Phone conversation with Steve Fields (California Department of Oil, Gas and Geothermal Resources), August 1, 2012.

needed to treat wastewater from a 35 mg/L VOC concentration down to a 5 mg/L concentration. According to the District's analysis, "a Wemco® will generally only get the VOC content down to about 20 mg/L;" therefore, additional water polishing equipment such as nut shell filters would be necessary to further reduce VOC levels down to 5 mg/L. This additional processing step adds to the overall capital and operational costs to further polish the clean produced water.¹² EPA contacted SCAQMD staff regarding this point. SCAQMD staff have indicated that Wemcos® and other treatment equipment alone are generally not able to treat the wastewater down to a 5 mg/L VOC concentration.¹³ SJVUAPCD determined that the cost associated with installing the above equipment with the additional filters was approximately \$54M/ton VOC reduced. This unusually high cost effectiveness value is heavily influenced by the low estimated emissions from clean produced water, 0.12 tons/year. Another more conservative cost analysis done by the District assumes an annualized cost of \$4M/year and a higher tonnage of VOC reduced per pond. The resulting cost effectiveness would be about \$70,000/ton VOC

12 SJVUAPCD Final Staff Report Revised Proposed Amendments to Rule 4402 December 15, 2011.

13 Email correspondence with Victor Juan (SCAQMD), August 28, 2012.

reduced, which exceeds reasonable costs under RACT.¹⁴ Based on our review of the District's analysis and our discussions with SCAQMD, we found no basis to conclude that 5 mg/L is RACT. Moreover, we note that the commenter did not provide information sufficient to support such a conclusion.

Comment #4: Earthjustice states that EPA requires SJVUAPCD to compare its rules not only to federal guidance, but also to current rules in other California air districts including SCAQMD, Bay Area AQMD, Sacramento Metropolitan AQMD, and Ventura County APCD. Earthjustice stated that it is not reasonable to claim that a technology which was deemed cost-effective in 1989 to comply with a 5mg/L VOC limit is not cost-effective today. The SJVUAPCD must explain why the technologies are now prohibitively expensive.

Response #4: As discussed above, compliance with a 5 mg/L VOC limit was not shown to be cost-effective in 1989 and has been shown to exceed RACT in SJVUAPCD today. Most operators in South Coast AQMD and Ventura County APCD do not treat their wastewater to meet 5 mg/L, but instead dispose of the water through the sanitary sewer system or by reinjection. These options are not generally available in San Joaquin due to the remote locations of

¹⁴ SCAQMD Staff Report Proposed Rule 1176 Sumps and Wastewater Separators September 20, 1989.

its oil production wells in relation to a municipal sewer system and the unavailability of reinjection wells.¹⁵

III. EPA Action

No comments were submitted that change our assessment of the rules as described in our proposed action. Therefore, as authorized in section 110(k)(3) of the Act, EPA is fully approving these rules into the California SIP.

IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by State law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

¹⁵ Technical Support Document for EPA's Proposed Notice on Rule 4402, Crude Oil Production Sumps, EPA Region IX, May 2012.

- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address disproportionate human health or environmental

effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: September 7, 2012

Jared Blumenfeld,
Regional Administrator,
Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52 [AMENDED]

1. The authority citation for Part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 et seq.

Subpart F - California

2. Section 52.220 is amended by adding paragraphs (c) (411) (i) (B) (2) and (3) to read as follows:

§52.220 Identification of plan.

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(c) * * *

(411) * * *

(i) * * *

(B) * * *

(2) Rule 4402, "Crude Oil Production Sumps," amended on December 15, 2011.

(3) Rule 4625, "Wastewater Separators," amended on December 15, 2011.

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