

El Dorado County
Air Quality Management District

Ex. B: STAFF REPORT

FEDERAL NONATTAINMENT
NEW SOURCE
REVIEW

PROPOSED REVISED
RULE 523-1

July 27, 2021

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STAFF REPORT
PROPOSED REVISED RULE 523-1,
FEDERAL NONATTAINMENT NEW SOURCE REVIEW

A. Executive Summary

On 12/7/21, the El Dorado County (EDC) Board of Supervisors will consider adoption of revisions to Rule 523-1, Federal Nonattainment New Source Review (NSR) Rule for New and Modified Major Stationary Sources in the EDC Air Quality Management District (AQMD). A major source (major stationary source or federal source) is a stationary source which emits, or has the potential to emit, ≥ 25 tons per year (tpy) of Volatile Organic Compounds/Reactive Organic Compounds (VOC/ROC) or Oxides of Nitrogen (NO_x) in areas classified as “severe” ozone nonattainment, or ≥ 50 tpy of VOC/ROC or NO_x in areas classified as “serious” ozone nonattainment, or ≥ 70 tpy of PM_{2.5} (fine particulate matter ≤ 2.5 microns) in PM_{2.5} nonattainment areas. Currently, there are no major sources in EDC nor are any foreseen in the near future. NSR Rule 523-1 applies only to major sources, while NSR Rule 523 also applies to non-major sources of these pollutants.

The EDC AQMD is located in two air basins: the Mountain Counties Air Basin (MCAB) and the Lake Tahoe Air Basin (LTAB). The more populated areas of EDC that lie within the MCAB are also located within the Sacramento Federal Ozone Non-Attainment Area (SFONA). The SFONA has been classified as non-attainment for the 2008 and 2015 8 hour National Ambient Air Quality Standard (NAAQS) for ozone. The 2015 federal 8-hr ozone NAAQS is 70 parts per billion (ppb).

In 2017, the United States Environmental Protection Agency (EPA) found the SFONA attained the 2006 federal 24-hr PM_{2.5} NAAQS. However, EPA has not yet officially designated the region as attainment for PM_{2.5}. Therefore, western EDC (approximately Pollock Pines westward to the County line) is still designated as nonattainment for the 2006 24-hr PM_{2.5} NAAQS. As such, EPA requires the EDC AQMD to implement measures to control emissions of ozone precursors VOC/ROC and NO_x; emissions of PM_{2.5} precursors NO_x, sulfur oxides (SO_x), VOC, ammonia; and emissions of PM_{2.5} from major stationary sources. The 2006 federal 24-hr PM_{2.5} NAAQS is 35 micrograms per cubic meter (ug/m³).

AQMD and the other Sacramento region air districts have committed to attaining the NAAQS by submitting a State Implementation Plan (SIP) to EPA. NSR rules are required as part of the SIP. Once the proposed revisions are approved, 523-1 will satisfy that SIP requirement. Rule 523-1 applies to any new or modified major source in EDC AQMD.

AQMD NSR Rule 523 was adopted on 4/26/94 and amended on 1/23/01, 11/20/01, 3/8/05 and 6/6/06. AQMD NSR Rule 523-1 was adopted on 3/8/16, to address PM_{2.5} and ozone precursors from federal or major sources. Adoption of Rule 523-1 satisfied the federal 2006 PM_{2.5} and 2008 ozone nonattainment area requirements. To satisfy the State of California SB288 anti-backsliding requirement, Rule 523 was left in place because it is more stringent than federal requirements, as it also applies to non-major sources of NO_x, SO_x, and VOC.

Rule 523-1 was submitted to EPA in June of 2016. EPA subsequently issued a completeness determination, but has not approved and included Rule 523-1 into the SIP. In February 2019, EPA

informed AQMD that they had re-evaluated 523-1, determined it to be deficient and requested specific revisions be made. On 6/25/19, AQMD revised and adopted Rule 523-1 in accordance with EPA's direction. However, on 12/7/20, EPA again notified AQMD that they had found additional minor deficiencies that required revisions. EPA provided a new template that indicated the revisions needed for approval. These revisions are minor and will not materially change the content of Rule 523-1. If these revisions are not adopted and submitted to the EPA in the near future, EPA could issue a limited approval/limited disapproval (LA/LD) action for the 6/25/19, version of 523-1, which would formally trigger a requirement to make these revisions for full approval. Full approval within 18 months of the LA/LD is required to stop the sanctions clocks that would start when a SIP action is disapproved.

In addition to correcting the minor deficiencies, the ozone Inter Pollutant Trading (IPT) provisions (Section 4, Restrictions on Trading Pollutants) will be removed. This is a result of the D.C. Circuit Court of Appeals ruling on 1/29/21, in the Sierra Club, ET, AL. against the EPA, Case No. 15-1465. That ruling found that the Clean Air Act (CAA) does not allow IPT for ozone precursors and vacated provisions allowing IPT for ozone precursors in EPA's nonattainment NSR regulations.

These revisions to 523-1 will not add new requirements to any existing source in EDC as there are no major sources. Any new major source that applies for a district permit after the revisions to 523-1 are adopted will be subject to the revised rule. Revised 523-1 will satisfy the federal requirement to have an approved Federal ozone and PM_{2.5} nonattainment NSR permitting program. Without these revisions, the Sacramento region may be subject to federal sanctions, including the loss of transportation funding.

B. Introduction

Rule 523-1 applies to all New and Modified Major Stationary Sources in EDC AQMD. Revised Rule 523-1 will continue to regulate PM_{2.5}, and the PM_{2.5} precursors NO_x, SO_x and VOC, and ammonia as nonattainment pollutants for any new major stationary source which will emit or have the potential to emit pollutants above the thresholds listed in the Major Source Definition (Rule 523-1, Section 2.1, 40 CFR 51.165(a)(1) and General Definitions). Currently, there are no permitted major stationary sources in EDC that emit or have the potential to emit at these levels. The submittal of a revised Rule 523-1 will also satisfy the upcoming obligation to submit a nonattainment NSR program for the 2015 ozone NAAQS.

Revised Rule 523-1 will be submitted to EPA for approval in the SIP. It will replace the 6/25/19 version of Rule 523-1 and replace Rule 523 in the SIP. Rule 523 will remain a local rule to satisfy the State of California SB288 NSR anti-backsliding requirements.

Because the proposed revisions are an "action taken to protect the environment", by imposing more stringent requirements the proposal falls under a categorical exemption pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15308. AQMD staff have prepared a Notice of Exemption to satisfy the CEQA requirements.

C. Background

In October of 2006, the EPA promulgated a new 24-hour PM_{2.5} NAAQS ([71 FR 61144](#)), that lowered the standard from 65µg/m³ to 35µg/m³. In December of 2009, the EPA Administrator established nonattainment designations for the 35µg/m³ standard, ([74 FR 58688](#)). A multi-county Sacramento region PM_{2.5} nonattainment area was designated. There are no federal reference PM_{2.5} monitors in EDC. But based on modeling, western EDC was included in that nonattainment area.

The region's PM_{2.5} monitoring data showed that the 2006 24-hour PM_{2.5} NAAQS was met by 12/31/11. In May of 2012, the California Air Resources Board (CARB) submitted a request that EPA find the Sacramento region had attained the standard. EPA issued a proposed rule for Determination of Attainment on October 26, 2012, and a final rule for Determination of Attainment on 07/15/13 ([78 FR 42018](#)). The final rule became effective on 8/14/13. While the Determination of Attainment finding relieved the Sacramento region air districts from various planning requirements, it did not relieve the AQMD of the requirement to submit a PM_{2.5} NSR rule. The AQMD can only be relieved of the NSR program requirement if EPA re-designates the AQMD to attainment. Re-designation to attainment requires the Sacramento region submit a maintenance plan demonstrating attainment will be maintained over the next 10 years and continue to be in attainment.

On 12/3/13, AQMD adopted and approved the submittal to CARB of a PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for Sacramento PM_{2.5} Nonattainment Area. However, the Sacramento region exceeded the 35µg/m³ standard by 0.1µg/m³ on the last day of 2013 at one monitoring site in Sacramento. Therefore, the request for EPA to re-designate the area to attainment has been delayed.

EPA allowed the use of data for the following year (2014) to be considered. The Sacramento region had a 'clean' year in 2014. Sacramento Metropolitan Air Quality Management District as the lead air district, began to prepare the new re-designation request in early 2015, but that has not yet been completed and submitted to EPA. Re-designation to attainment would have relieved AQMD from the need to adopt 523-1.

On 10/8/15, the Center for Biological Diversity et al. filed a lawsuit against the EPA asserting EPA had failed to make findings of failure to submit (FFS) for nonattainment SIPs for the 2006 PM_{2.5} standard for multiple areas throughout the United States.¹ EPA negotiated a Consent Decree and issued a Finding of Failure to Submit (FFS) in April 2016 ([81 FR 19175](#)). However, because AQMD adopted Rule 523-1 in March 2016 and submitted the rule prior to EPA's issuance of the FFS, thus EDC was not included in the FFS. AQMD received a Completeness Finding from EPA in June 2016 ([81 FR 36803](#)). However, EPA has not yet approved including Rule 523-1 into the SIP due to the need for additional revisions.

On 8/24/16, EPA promulgated a rule entitled Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements ("2016 Implementation Rule") ([81 FR 58010](#)). This Implementation Rule, which implements the D.C. Circuit court's January 2013

¹ [Center for Biological Diversity et al vs. Gina McCarthy, US EPA Administrator, Case 4:15-cv-04663 filed 10/8/2015.](#)

decision in *NRDC v. EPA*,² areas classified as nonattainment for any PM_{2.5} NAAQS are required to comply with the parts of CAA subpart 4 section 189(e)³ that require the control of major stationary sources of PM₁₀ (fine particulate matter ≤ 10 microns) precursors (and hence under the court decision, PM_{2.5} precursors) “except where the Administrator determines that such sources do not contribute significantly to PM₁₀ levels which exceed the standard in the area.” The 2016 Implementation Rule amended the definitions of (1) Regulated NSR Pollutant with regards to PM_{2.5} precursors; (2) Major Stationary Source with regards to major sources located in Moderate and Serious PM_{2.5} nonattainment areas; and (3) Significant with regards to emissions of PM_{2.5} precursors. Rule 523-1 is subject to these new regulatory requirements.

On 5/10/17, EPA found the Sacramento region attained the 2006 federal 24-hr PM_{2.5} NAAQS ([82 FR 21711](#)). However, the required PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for the Sacramento region has not yet been submitted to EPA. This Plan details how the region will stay in attainment for 10 years. Therefore, western El Dorado County is still designated nonattainment of the 2006 federal PM_{2.5} NAAQS.

On 6/25/19, AQMD adopted a revised version of Rule 523-1 based on the EPA legal staff recommendations include provisions pertaining to PM_{2.5} to satisfy the new 2016 Implementation Rule requirements.

On 9/22/20, Sierra Club, ET AL filed law suit against the EPA challenging four provisions of the EPA's 2015 and 2018 rules implementing the NAAQS for ozone⁴. The petitioners challenged (1) the interprecursor trading program, (2) allowing states to demonstrate compliance with the Act's reasonable further progress milestone requirements through an implementation-based method, (3) allowing states to choose between two options for the reasonable further progress baseline year, and (4) allowing nonattainment areas to use already-implemented measures to satisfy the Act's contingency measures requirements. The D.C. Circuit court's January 2021 decision vacated the interprecursor trading program and the interpretation of the Clean Air Act's contingency measures requirements. The court also vacated provision of the implementation of the milestone compliance demonstration requirement. Finally, the court denied the petition for review with respect to the alternative baseline years provision.

In December 2020, EPA informed AQMD that they had found some deficiencies in the 6/25/19, Rule 523-1 version. Rather than progressing forward with a limited approval/limited disapproval of the 6/25/19 version of Rule 523-1, EPA recommends AQMD again revise Rule 523-1, and resubmit the revised version of Rule 523-1 in lieu of the 2019 version for EPA approval. This latest revised version of Rule 523-1 includes all the clarifications and corrections EPA has stated are needed for full SIP-approval.

After AQMD adopted revisions to Rule 523-1 in 2019, EPA promulgated a more stringent 2015 ozone NAAQS, designated AQMD as moderate nonattainment for this 2015 ozone NAAQS, and issued a Final Implementation Rule ([83 FR 62998](#)). Adoption of the proposed revisions to Rule 523-1 will satisfy the federal nonattainment new source review requirements for the 2006 PM_{2.5}, 2008 ozone and 2015 ozone NAAQS.

² [Natural Resources Defense Council \(NRDC\) et al vs. EPA, Nos 08-1250, 09-1102, 11-1430](#)

³ [CAA Section 189\(e\), 42 U.S.C. § 7513a\(e\)](#)

⁴ <https://law.justia.com/cases/federal/appellate-courts/cadc/15-1465/15-1465-2021-01-29.html>

D. Proposed Revisions

The needed changes to Rule 523-1 include:

- Clarifications of the New Major Stationary Sources and Major Modifications definitions,
- Various updates to definitions, including removal of PM₁₀, from the definition of “Nonattainment Major New Source Review program” as the region is in attainment for this pollutant,
- Revisions to Restrictions on Trading Pollutants for offset purposes, specifically removal of provisions that allow ozone interprecursor trading due to the 1/29/21 ruling by the D.C. Circuit Court of Case No. 15-1465.
- Various nomenclature changes throughout.

These proposed revisions to Rule 523-1 will not result in any new requirements for existing EDC sources. Currently there are no major stationary sources in EDC and we are unaware of any potential facilities that would meet this definition in the foreseeable future. Once approved by EPA, revised Rule 523-1 will satisfy NSR requirements for the 2006 PM_{2.5}, the 2008 ozone and 2015 ozone NAAQS. When the District is re-designated to attainment of the PM_{2.5} and the ozone NAAQS, this rule will no longer apply to any major sources of those pollutants.

E. Impacts of New Rule (H&S Code § 40703)

When adopting any regulation, AQMD must consider and make available to the public, its findings related to the cost effectiveness of a control measure, the basis for the findings and the considerations involved.

Emission Impact (CEQA CCR Title 14, § 15180 to 15190)

Staff cannot quantify the potential emission reductions as this rule applies to potential future permit applications. Any emission reductions would result from affected sources either taking lower permit limits or from surrendering more emission reduction credits. Rule 523 already controls the PM_{2.5} precursors VOC and NO_x at levels below those required by federal law.

Cost Impact (H&S Code § 40920.6(a))

California Health & Safety Code (H&SC) Section 40920.6(a) requires AQMD to analyze the cost effectiveness of new rules or rule amendments that implement Best Available Retrofit Control Technology (BARCT). The proposed amendments do not add BARCT requirements and therefore are not subject to the cost effectiveness analysis mandate.

Socioeconomic Impact (H&S Code § 40728.5)

H&SC Section 40728.5, in relevant part, requires the AQMD Board to consider the socioeconomic impact of any new rule if air quality or emission limits are significantly affected. However, air districts with a population of less than 500,000 are exempted from this requirement. The current population of EDC is approximately 185,015 people.

F. Environmental Impacts of Method of Compliance (CA PRC § 21159)

California Public Resource Code Section 21159 requires the AQMD to perform an environmental analysis of the reasonably foreseeable methods of compliance. The analysis must include the following information for the proposed revised Rule 523-1:

1. An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.
2. An analysis of the reasonably foreseeable mitigation measures.
3. An analysis of the reasonably foreseeable alternative means of compliance with the rule or regulation.

However, Section 21159 also states, *“In the preparation of this analysis, the agency may utilize numerical ranges or averages where specific data is not available; however, the agency shall not be required to engage in speculation or conjecture.”* Further, *“This section does not require the agency to conduct a project-level analysis.”*

Since there are no current permitted facilities in EDC to which current Rule 523-1 or the proposed revised Rule 523-1 would apply and AQMD is not aware of any affected facilities considering locating in EDC, staff will not engage in speculation or conjecture and cannot reasonably foresee what methods of compliance a facility might use to be consistent with the proposed Rule.

G. Regulatory Findings (H&S Code § 40727)

H&SC Section 40727(b) requires that prior to adopting or amending a rule, an air district must make findings of necessity, authority, clarity, consistency, nonduplication, and reference.

Necessity

Districts with areas designated as nonattainment for federal NAAQS are required by EPA to establish Federal NSR Rules for inclusion into the SIP. Proposed revised Rule 523-1 would satisfy this requirement for the 2006 PM_{2.5}, the 2008 Ozone and 2015 Ozone NAAQS.

Authority

AQMD is authorized to adopt rules and regulations by H&SC Sections 40000, 40001, 40702, 40716, 40919, and 42300 and 1990 Federal Clean Air Act Sections 110(a)(2)(H) and 182(d).

Clarity

AQMD has reviewed the proposed revised Rule and determined that it can be easily understood by the affected industry. Other California air districts have and are in the process of adopting this same model rule.

Consistency

The proposed revised Rule is not in conflict with or contradictory to any existing statutes, court

decisions, state or federal regulations.

Nonduplication

The proposed revised Rule does not conflict with any state laws or regulations, regarding attainment and maintenance of state and federal air quality limits.

Reference

All statutes, court decisions, and other provisions of law used by the AQMD in interpreting this regulation are incorporated into this analysis by reference.

H. Public Comments

As of the time of submittal of this staff report to the County Clerk, AQMD had received no public comment on the proposed revised Rule.