

Meeting Date: 10/24/2024
Report Type: PUBLIC HEARINGS
Report ID: 2024-1024-8.



Title: Contingency Measures for the 2008 and 2015 Ozone Standards: Revisions to the State Implementation Plan (SIP), Rule 489 - Greenwaste Composting Operations, and Rule 490 - Liquefied Petroleum Gas Transfer and Dispensing

Recommendation: Conduct a public hearing to adopt the 2008 and 2015 ozone standard contingency measures. This includes the revision to the State Implementation Plan (SIP) and the adoption of Rules 489 (Greenwaste Composting Operations) and 490 (Liquefied Petroleum Gas Transfer and Dispensing). Determine that these actions are exempt from the California Environmental Quality Act (CEQA) and direct staff to forward all necessary supporting documentation to the California Air Resources Board (CARB) for submittal to the U.S. Environmental Protection Agency (EPA).

Rationale for Recommendation: The District is part of the Sacramento Federal Nonattainment Area (SFNA). The EPA has determined that the the SFNA does not meet Clean Air Act (CAA) requirements for Contingency Measures for the 2008 and 2015 National Ambient Air Quality Standard (NAAQS). To avoid imposition of a Federal Implementation Plan (FIP) by the EPA, the SFNA must correct the deficiencies by July 17, 2025 through an EPA approved SIP revision, by adopting rules 489 and 490 as contingency measures. These measures are designed to reduce volatile organic compound (VOC) emissions and will ensure emission reductions are automatically triggered, without any further rulemaking or other action, if the area fails to meet progress milestones or attainment deadlines. EPA will not approve plans that do not include contingency measures, and disapproval of plans start federal sanctions clocks.

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Presentation: Yes

ATTACHMENTS:

Resolution: SIP Revision to Address Contingency Measure Requirements for the 2008 & 2015 8-Hour Ozone NAAQS

Resolution A: Rule 489 Greenwaste Composting Operations

Resolution B: Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

Attachment 1: Contingency Measure SIP Revision

Attachment 2: Rule 489 Statement of Reasons

Attachment 3: Rule 490 Statement of Reasons

Attachment 4: SIP Public Hearing Notice

Attachment 5: SIP Evidence of Public Notice

Attachment 6: Rule 489 Evidence of Public Notice

Attachment 7: Rule 490 Evidence of Public Notice

Exhibit A: Proposed Rule 489

Exhibit B: Proposed Rule 490

Presentation: Contingency Measures for the 2008 & 2015 Ozone Standards; Proposed New Rule 489 Greenwaste Composting Operations; and Proposed Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

Approvals/Acknowledgements

Executive Director or Designee: Alberto Ayala, Report Approved 10/16/2024

Discussion / Justification: The SFNA is already designated as a 'severe' nonattainment area for the 2008 federal 8-hour ozone standard, and a similar designation is pending for the 2015 standard. Due to that designation, the SFNA is required under Sections 172 and 182 of the Clean Air Act to adopt contingency measures that automatically trigger if it fails to meet established reasonable further progress goals or to attain the NAAQS by the attainment date. The SFNA air districts' adopted and proposed contingency measures are identified in the analysis, and the proposed contingency measures are expected to be adopted before the end of 2024.

On October 21, 2021, the EPA approved all revisions to the SIP except for the contingency measures, deferring final action due to a pending court decision on SIP contingency approvals. Following a series of rulings, the EPA issued draft contingency measure guidance in March 2023, which outlined specific criteria and a new method for calculating the emission reductions required.

Subsequently, on July 15, 2023, the EPA disapproved the SFNA's SIP contingency measures for the 2008 ozone standard, citing the absence of adequate measures that would be triggered if the area fails to meet the attainment or progress goals. This disapproval started a sanctions clock that will impose penalties unless the SFNA air districts adopt appropriate, EPA approved, SIP revisions. The first sanction, an increased emission offset ratio of 2:1, would be imposed on January 17, 2025, followed by a loss of federal highway funds for non-obligated transportation projects on July 17, 2025.

In response, the SFNA has conducted an analysis aligned with with the EPA's guidance to identify the necessary contingency measures for SIP approval. The SFNA air districts intend to resolve the deficiencies related to the 2008 ozone standard, and meet the contingency requirements for the 2015 standard through this SIP revision. Upon EPA approval of this SIP revision and the adopted contingency measures, the sanctions process will be halted, and the EPA will no longer be required to impose a FIP for the SFNA.

Proposed contingency measures, Rule 489 (Greenwaste Composting Operations) and Rule 490 (Liquefied Petroleum Gas Transfer and Dispensing) are intended to reduce VOC emissions if contingency conditions are triggered for either the 2008 or 2015 ozone NAAQS. More detailed descriptions of these rules are provided in the "Summary of Plan / Rule / Amendment" section below. If approved by the Board, these rules will be forwarded to CARB for submittal to EPA as a revision to the SIP.

Summary of Plan / Rule / Amendment:

Staff performed an analysis consistent with EPA's "Draft Guidance on the Preparation of State Implementation Plan Provisions that Address the Nonattainment Area Contingency Measure Requirements for Ozone and Particulate Matter." The analysis shows that several volatile organic compound (VOC) measures are required to satisfy the contingency measure requirements for both the 2008 and 2015 8-hour federal ozone standards. The SFNA air districts have adopted or are proposing several VOC contingency measures, including:

1. Architectural Coatings (adopted by all SFNA air districts)
2. Composting (proposed to be adopted by SMAQMD in October 2024 and Yolo-Solano AQMD in December 2024)
3. Liquefied Petroleum Gas Transfer and Dispensing (proposed to be adopted by SMAQMD in October 2024)
4. Solvent Cleaning (proposed to be adopted by Placer County APCD in December 2024).

The analysis concluded that there are no feasible NOx measures the air districts could implement as contingency measures. However, CARB's updated Smog Check Program, if triggered as a contingency measure, will accelerate vehicle smog checks by one to two years, providing minimal reductions in VOC and NOx.

By adopting these proposed contingency measures, the SFNA air districts will address the deficiencies identified

in the contingency requirements and, upon EPA approval, satisfy the remaining SIP requirement. The remaining identified contingency measures, which will automatically take effect if contingency conditions are triggered, are:

Rule 489 Greenwaste Composting Operations

This rule applies to composting facilities of any throughput that are subject to Local Enforcement Agency (LEA) notification or permitting requirements. Greenwaste, includes any organic waste material such as grass clippings, leaves, tree and shrub trimmings, and plant remains, with up to 20 percent manure by volume. The rule requires that each active phase compost pile be covered with a layer of finished compost after forming the pile and that water be applied before turning the pile. These measures are expected to reduce VOC emissions from composting by 40%. Facilities will be required to maintain on-site records and submit them to the District annually.

Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

This rule applies to LPG bulk plants and LPG transfer and dispensing facilities. The rule includes equipment and operational requirements for the transfer and dispensing of LPG from any cargo tank, stationary or portable storage tank, or cylinder into any other cargo tank, stationary or portable storage tank, or cylinder. Emission reductions are achieved using low emission connectors and low emission Fixed Liquid Level Gauges (FLLGs). Owners/operators of affected facilities will be required to implement leak detection and repair programs. They will also be required to meet training, reporting, and recordkeeping requirements .

Financial Considerations:

Rule 489 Greenwaste Composting Operations

Implementation of rule 489, if triggered, will not require additional Staff resources. The only facility currently subject to this rule is Lopez Agricultural Services (Lopez Ag), which is already subject to periodic inspections by the District.

Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

Rule 490, if triggered, will require 0.50 full-time equivalents (FTE) in the first year for development of inspection protocol and compliance inspections, with 0.25 FTE required in subsequent years for ongoing compliance monitoring.

Emissions Impact:

When this SIP revision is implemented, rule amendments and new rules will reduce VOC emissions in the SFNA as a whole by 613 tons per year in 2024 and 610 tons per year in 2032. The estimated reduction of fugitive VOC emissions for proposed rules 489 and 490, if triggered, are as follows:

Rule 489 Greenwaste Composting Operations

34 tons per year in 2024 and 33 tons per year in 2032.

Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

72 tons per year in both 2024 and 2032.

Economic Impact:

When this SIP revision is implemented, the sources subject to each of the contingency measures may incur compliance costs. The economic impact of those costs will be evaluated during the rulemaking process.

Rule 489 Greenwaste Composting Operations

Lopez Ag, is the only facility currently subject to the proposed rule. Compliance costs include additional labor and operational costs for finished compost covering, watering of piles, and the on-going recordkeeping requirements. For Lopez Ag, the LEA and District permits for the source already require recordkeeping and reporting of facility throughputs. Compliance costs are estimated to be \$41,911 per year.

The overall cost-effectiveness of proposed Rule 489 is estimated to be \$1,581 per ton (\$0.79 per pound) of VOC reduced. In comparison, previously adopted District rules have had cost-effectiveness values for emissions reductions, in 2024 dollars, ranging from \$1.62 to \$27.39 per pound of VOC reduced. The District's current maximum cost-effectiveness for requiring Best Available Control Technology for new sources is \$13.15 per

pound of VOC reduced.

Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

The proposed rule will require sources to retrofit existing connectors and FLLGs with low emission connectors and low emission FLLGs. The rule also requires sources to perform leak detection and repair, training programs, and routine maintenance. These are already common practice in the industry and the costs associated with these requirements would be minimal. Potential costs to sources are estimated at \$734,863 per year. This includes the initial equipment costs (annualized) and ongoing operational costs such as quarterly inspections, reporting, recordkeeping, and tank maintenance.

The overall cost-effectiveness of proposed Rule 490 is estimated to be \$5.14 per pound of VOC reduced. In comparison, previously adopted District rules have had cost-effectiveness values for emissions reductions, in 2024 dollars, ranging from \$1.62 to \$27.39 per pound of VOC reduced. The District's current maximum cost-effectiveness for requiring Best Available Control Technology for new sources is \$13.15 per pound of VOC reduced.

Public Outreach/Comments:

Revision to the 2008 and 2015 Ozone State Implementation Plans

Staff held a public workshop on September 18, 2024, to discuss the necessity of the SIP submittal and the proposed contingency measures. The public notice for the workshop was emailed to interested parties and posted on the District website, along with the draft analysis for public review. No comments from the public were received during the workshop.

For today's hearing, public outreach included:

- A notice posted on the District website with links to the proposed contingency measure and reasoned justification analysis.
- Email notices to all persons who have requested SIP planning or general interest notices.

Rule 489 - Greenwaste Composting Operations

Staff met with representatives of the lone affected source, Lopez Ag, on September 18, 2024. During the meeting, the proposed rule requirements and potential impacts were discussed. The primary change to their current operation will be adding finished compost to the tops of windrows after initial pile formation; however, the source did not anticipate any undue cost impacts.

For today's hearing, public outreach included:

- A public notice in the *Sacramento Bee*.
- A notice posted on the District website with links to the proposed rule and Statement of Reasons.
- Email notices to CARB and EPA, Lopez Agricultural Services, and all persons who have requested rulemaking notices.

As of the date of this report, no additional comments have been received in response to the notice for today's hearing. Any comments received prior to the public hearing will be distributed to Board members at the meeting.

Rule 490 - Liquefied Petroleum Gas Transfer and Dispensing

A public workshop was held on September 19, 2024, to discuss the draft rule and Statement of Reasons. The notice was emailed to individuals requesting rulemaking updates and posted on the District website. The draft rule and Statement of Reasons were sent to CARB and EPA and made available for public review at that time. The workshop was held at the District office and participants were given the option to attend in person or via Zoom.

Following the workshop, staff received written comments from the Western Propane Gas Association (WPGA) and held a follow-up meeting on September 23, 2024, to address their feedback. Their comments and Staff's responses are included in Appendix C of the Statement of Reasons.

For today's hearing, public outreach included:

- A public notice in the *Sacramento Bee*.
- A notice posted on the District website with links to the proposed rule and Statement of Reasons.
- Email notices to CARB and EPA and all persons who have requested rulemaking notices.

Aside from the comment letter from the WPGA on September 23, 2024, no further comments have been received as of the date of this report. Any comments received prior to the public hearing will be distributed to Board members at the meeting.

Environmental Review:

California Public Resources Code Section 21159 requires an environmental analysis of the reasonably foreseeable methods of compliance. Staff has concluded there will be no adverse environmental impacts from the proposed rules. Staff finds that the proposed rules are exempt from the California Environmental Quality Act (CEQA) as an action by a regulatory agency for the protection of the environment (Class 8 Categorical Exemption, §15308 State CEQA Guidelines) and because it can be seen with certainty that there is no possibility that the activities in question may have a significant adverse effect on the environment (§15061(b)(3), State CEQA Guidelines).

Rule 489 Greenwaste Composting Operations

Staff expects that operators will comply with the rule by covering each active phase compost pile with a layer of finished compost and applying water before turning the pile. If triggered, the rule would result in an air quality benefit by reducing VOC emissions from greenwaste composting operations by 34 tons per year in 2024 and 33 tons per year in 2032.

Rule 490 Liquefied Petroleum Gas Transfer and Dispensing

Staff expects that LPG bulk loading facilities and LPG transfer and dispensing facilities will comply with the proposed rule by replacing existing connectors and FLLGs with their low emission counterparts. Specifically for on-site forklift tank refilling operations, operators may choose to install a liquid pump, convert to a cylinder exchange service, or have cylinders refilled directly from bobtail trucks visiting the facility. If triggered, the rule would result in an air quality benefit by reducing VOC emissions from LPG transfer and dispensing by 72 tons per year.