



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT
Proposed Amendments to
Regulation 12, Rule 15: Petroleum Refining Emissions
Tracking



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ACKNOWLEDGEMENTS

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STAFF REPORT

Regulation 12, Rule 15: Petroleum Refining Emissions Tracking

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I. EXECUTIVE SUMMARY

Petroleum refineries in the Bay Area are among the largest stationary sources of air pollutants in the region. The nature of these facilities is such that there are a high number of individual sources that are often interconnected in a complex configuration. This complexity contributes to difficulty in ensuring accurate attribution of emissions to the corresponding source. Additionally, calculation of emissions from the sources requires a significant amount of supplemental data that is not readily available or inferable without substantiating documentation.

Regulation 12, Rule 15: Petroleum Refining Emissions Tracking (“Rule 12-15”) was developed to, in part, obligate petroleum refineries and their support facilities to provide an Annual Emissions Inventory (AEI) detailing source-level emissions and their supporting calculations. Each AEI was due to the Bay Area Air Quality Management District (“Air District”) on June 30 of each year and would contain emissions information for the previous calendar year. Rule 12-15 was adopted in 2016 and therefore AEIs have so far been submitted to the Air District for calendar years 2016, 2017, and 2018.

Upon receipt of the AEIs, the Air District reviews the submittal and identifies any deficiencies or items requiring clarification such as missing or incorrect data or incorrect emissions estimation methodologies, and notifies the appropriate facility for review, correction, and resubmittal. The intent of these review-and-response periods is to ensure data accuracy.

In December 2018, the California Air Resources Board (CARB) adopted the “Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants” (“CTR Regulation”), which established requirements and deadlines associated with reporting of criteria pollutant and air toxic emissions. The CTR Regulation included deadlines for subject facilities to report information to the local air districts by May 1 of each year, and for air districts to report information to CARB by August 1 of each year. The CTR Regulation states that the District rules “may specify an earlier submittal date which supersedes the May 1 submittal date.”

Petroleum refineries and their support facilities in the Bay Area are subject to the CTR Regulation reporting requirements. Although the reporting requirements of Rule 12-15 are more comprehensive than the CTR Regulation, portions of the Rule 12-15 AEI may be used to comply with the CTR Regulation. Therefore, it is practical to coordinate the reporting deadline required by Rule 12-15 with the deadlines required by CARB’s CTR Regulation. Specifically, advancing the Rule 12-15 reporting deadline to earlier in the calendar year will allow review of and, if needed, corrections to the inventory prior to submittal to CARB. This will allow subject facilities to submit one set of submittals for the Air District’s review of compliance with both Rule 12-15 and the CTR Regulation while meeting the Air District’s reporting deadline stipulated in the CTR Regulation.

In addition to the CTR Regulation, facilities subject to Rule 12-15 are also subject to CARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (“MRR Regulation”), which requires submission of emissions inventories for greenhouse gases directly to CARB. The MRR Regulation also requires that inventories be verified by third-parties. The current Rule 12-15 requires facilities to report greenhouse gas emissions for all stationary sources and that emissions should be calculated consistently with the MRR Regulation. However, the MRR Regulation does not apply to all stationary sources that may be at a Rule 12-15

facility and that may have reporting exemptions listed within the MRR Regulation. As such, the Rule 12-15 greenhouse gas AEI may be more comprehensive than the MRR Regulation.

The MRR Regulation lists two reporting deadlines for subject facilities: April 10 of each year for initial greenhouse gas inventories that have not been verified by a third-party and August 10 for final third-party verified emissions inventories. As CARB currently receives greenhouse gas emissions inventories per the MRR Regulation, the CTR Regulation does not apply to greenhouse gases and thus the CTR Regulation reporting deadline of August 1 is not impacted by the August 10 deadline.

Although the current Rule 12-15 deadline of June 30 is prior to the August 10 MRR Regulation deadline, facilities are required to amend their submittals if the third-party verified emissions inventories differ from what was submitted in the AEI.

In order to meet the August 1 deadline required by the CTR Regulation, the Air District should receive the AEI from subject facilities with sufficient time to review and correct the submission, as necessary. Previous Air District reviews of submitted AEIs have taken between 90 to 180 days owing to the complexity and volume of submitted materials as well as the responsiveness of the facilities to information requests. Until such time that the Air District can develop and implement automated tools for receiving and conducting quality assurance checks on Rule 12-15 submitted information, the Air District anticipates that future AEI reviews will continue to be complex, requiring either lengthy review periods or more resources.

Prior to the current proposed amendment, the Air District met with the Rule 12-15 subject facilities and their trade association to understand their concerns regarding an earlier deadline as well as steps that the facilities can take to aid the Air District's review and shorten the time necessary to ensure the desired accuracy of submitted emissions inventories. The Air District will continue to meet with the subject facilities and trade association to develop and implement measures for aiding Air District reviews of the AEIs. With implementation of these measures as well as requiring that all materials be electronically submitted, the Air District anticipates that the review period, required for accurate and defensible emissions inventories, may be shortened.

Accounting for the concerns of the subject facilities, the MRR Regulation deadline of April 10, and the measures that the facilities will take to aid Air District review of the AEIs, the Air District is proposing that Rule 12-15 AEIs be electronically submitted by April 15 of each year.

The proposed changes to Rule 12-15 include:

- Revising the Annual Emissions Inventory (AEI) submission deadline from June 30 to April 15,
- Making explicit the requirement for subject facilities to submit third-party verified greenhouse gas emissions inventories,
- Various administrative edits to accommodate the revisions identified above.

II. BACKGROUND

Background information for the rule development project for Rule 12-15 is available in the Background sections of the staff report prepared for the rule's adoption in 2016, attached as Attachment 1 (Rule 12-15 Adoption Staff Report).

III. REGULATORY FRAMEWORK

Information on the regulatory context and framework pertinent to sources and facilities subject to Rule 12-15 can be found in the Attachment 1 staff report.

IV. PROPOSED AMENDMENTS

A. Amendments to Definitions

Third Party Verified Greenhouse Gas Annual Emissions Inventory

CARB's MRR Regulation requires subject facilities to submit their greenhouse gas emissions inventory to CARB on April 10 of each year. The same facilities must then seek third-party verification of their greenhouse gas emissions inventory pursuant to the standards identified in the MRR Regulation. The third-party verified greenhouse gas annual emissions inventory is due to CARB on August 10 of each year.

Rule 12-15 does not currently explicitly outline submission requirements for these two inventories as they are submitted directly to CARB. However, the proposed changes to Rule 12-15 include requirements to submit these inventories to the Air District five days after they are due to CARB. For this reason, a definition of "third-party verified greenhouse gas annual emissions inventory" was added to ensure clarity with which report was due to the Air District.

B. Amendments to Administrative Requirements

Annual Emissions Inventory

The annual emissions inventory submission deadline is being revised from June 30 to April 15 for criteria air pollutants, toxic air contaminants, and greenhouse gases. An explicit requirement to submit a third-party verified greenhouse gas annual emissions inventory on August 15 is being added.

Additionally, electronic submission of the AEI is now required for expediency and ease of review.

Review and Approval of Annual Emissions Inventory

Upon receipt of the AEI, the Air District reviews the submittal for accuracy and issues a response to the subject facility indicating any deficiencies in need of correction. With the adoption of the CTR Regulation, the Air District must finalize the review and correction of the inventories by August 1 for submittal to CARB. Based on experience with the prior three years of inventory review, the concerns of subject facilities, and steps that subject facilities have agreed to implement to shorten the time necessary for the Air District's review, the Air District is

adjusting the timing of the review-and-response periods accordingly. This section is being updated to appropriately reflect the timing for the period between submission to the Air District (April 15) and subsequent submission to CARB (August 1).

Availability of Monthly Crude Slate Reports

Administrative corrections are being made to accommodate insertion of a new “Table 1” into Rule 12-15.

V. EMISSIONS and EMISSIONS REDUCTIONS

The proposed amendments to Rule 12-15 would have no impact on emissions. Rule 12-15 is an emissions reporting rule, so no controls are required and the amendments affect only emissions reporting.

VI. ECONOMIC IMPACTS

A. Cost Effectiveness and Incremental Cost Effectiveness

Section 40920.6 of the California Health and Safety Code requires an air district to perform an incremental cost analysis for a proposed rule, if the purpose of the rule is to meet the requirement for best available retrofit control technology or for a feasible measure. The proposed amendments are not best available retrofit control technology requirements, nor are they a feasible measure required under the California Clean Air Act; therefore, an incremental cost analysis is not required.

B. Socioeconomic Impacts

Section 40728.5 of the California Health and Safety Code requires an air district to assess the socioeconomic impacts of the adoption, amendment, or repeal of a rule or regulation that will significantly affect air quality or emissions limitations. A socioeconomic analysis was completed by Applied Development Economics in April 2016 prior to the December 2016 adoption of Rule 12-15. At that time, Applied Development Economics determined that the socioeconomic impact of the implementation of Rule 12-15 was less than significant.

Applied Development Economics’ determination of socioeconomic impact considered the annual cost to subject facilities of preparation of the Annual Emissions Inventory. The analysis did not identify that the expected annual cost was affected by the timing of the report submission deadline.

The District recognizes that requiring the Annual Emissions Inventory earlier in the calendar year may impact the subject facilities resource allocation and expenditure. However, the proposed changes will not affect the amount or complexity of work required, only the timing of that work. Any impact is most likely to be experienced during the first year as personnel at refineries make adjustments to accommodate the new timing. The District believes any impacts should be minimal given that there is sufficient time to schedule work to meet the new inventory submittal deadline. Moreover, the proposed changes to Rule 12-15 also include a reduction to the number and length of review-and-response periods between the subject facilities and the

District. This reduction is expected to appreciably offset any potential increased costs incurred by requiring the submission at an earlier date.

The District does not expect that moving the date per the proposed changes to Rule 12-15 will significantly affect the annual cost to the subject facilities. There may be separate costs associated with the implementation of the CTR Regulation that will be considered outside of Rule 12-15. These separate costs will apply to permitted facilities subject to the CTR Regulation in future amendments to Regulation 3: Fees. Therefore, in satisfaction of the requirement of Section 40728.5 of the California Health and Safety Code to conduct a socioeconomic impact analysis, the District assesses that the socioeconomic impact of the proposed changes to Rule 12-15 is negligible. It follows that there are no recommended actions to consider that would minimize adverse socioeconomic impacts. For informational purposes, the April 2016 socioeconomic analysis is provided as an attachment to this report as Attachment 2.

C. District Impacts

The Air District currently receives and processes the AElS for all subject facilities. As familiarity with the submissions increases and steps are taken by the subject facilities to shorten the time need for a proper Air District review, resource requirements are expected to decrease. Revising the submission deadline for the AElS is not expected to appreciably impact staffing load provided electronic submittals and the facilities implement measures to reduce the time needed to review AElS.

VII. REGULATORY IMPACTS

Regulatory impact information on the facilities, sources, and emissions subject to Rule 12-15 can be found in the Attachment 1 staff report.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The District has determined that these amendments to Rule 12 15 are exempt from provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) pursuant to State CEQA Guidelines, Section 15061, subd. (b)(3). The amendments are administrative in nature, do not affect air emissions from any sources, and have no possibility of causing significant environmental effects. The District intends to file a Notice of Exemption pursuant to State CEQA Guidelines, Section 15062.

IX. CONCLUSION / RECOMMENDATIONS

Pursuant to the California Health and Safety Code section 40727, before adopting, amending, or repealing a rule the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication, and reference. This section addresses each of these findings.

A. Necessity

“‘Necessity’ means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority.” H&SC section 40727(b)(1)

The proposed amendments to Rule 12-15 are necessary to accommodate the recently adopted report submission deadlines by CARB's CTR Regulation.

B. Authority

“Authority’ means that a provision of law or of a state or federal regulation permits or requires the regional agency to adopt, amend, or repeal the regulation. H&SC section 40727(b)(2)

The Air District has the authority to adopt amendments to these rules under Sections 40000, 40001, 40702, and 40725 through 40728.5 of the California Health and Safety Code.

C. Clarity

“Clarity’ means that the regulation is written or displayed so that its meaning can be easily understood by the persons directly affected by it.” H&SC Section 40727(b)(3)

Proposed amendments to Rule 12-15 are written so that their meaning can be easily understood by the persons directly affected by them. Further details in the staff report clarify the specific amendments to Rule 12-15.

D. Consistency

“Consistency’ means that the regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.” H&SC Section 40727(b)(4)

The proposed amendments to the existing rule are consistent with other Air District rules, and not in conflict with state or federal law.

E. Non-Duplication

“Nonduplication’ means that a regulation does not impose the same requirements as an existing state or federal regulation unless a district finds that the requirements are necessary or proper to execute the powers and duties granted to, and imposed upon, a district.” H&SC Section 40727(b)(5)

Proposed amendments to Rule 12-15 are non-duplicative of other statutes, rules or regulations. To the extent duplication exists, such duplication is appropriate for execution of powers and duties granted to and imposed upon the Air District.

F. Reference

“Reference’ means the statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation. H&SC Section 40727(b)(6)

The proposed rules have met all legal noticing requirements, have been discussed with the regulated community and other interested parties, and reflect the input and comments of affected and interested stakeholders.

G. Recommendations

District staff recommends adoption of proposed Regulation 12, Rule 15: Petroleum Refining Emissions Tracking.

ATTACHMENTS

1. Staff Report for the Proposed Air District Regulation 12, Rule 15 Petroleum Refining Emissions Tracking, April 2016
2. Socio-Economic Analysis of Proposed Regulation 12, Rule 15: Petroleum Refining Emissions Tracking, April 2016