State of California AIR RESOURCES BOARD

First Notice of Public Availability of Modified Text and Availability of Additional Documents

PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS

Public Hearing Date: September 22, 2016
Public Availability of Modified Text: December 21, 2016
Deadline for Public Comment: January 20, 2017

At its September 22, 2016, public hearing, staff presented the Air Resources Board (ARB or Board) with amendments to California's existing Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Regulation or MRR) (title 17, California Code of Regulations, (CCR), section 95100 *et seq.*), to ensure that reported greenhouse gas (GHG) data are accurate and fully support the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms (title 17, California Code of Regulations, section 95800 et seq.) (Cap-and-Trade Regulation). Staff also presented revisions to ensure the data that are collected for ARB's other climate change programs are complete, accurate, and comply with the United States Environmental Protection Agency Clean Power Plan. The amendments were developed pursuant to the requirements of the California Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32).

At its September 22, 2016, public hearing, the Board was informed of proposed amendments including modifications to sections 95101, 95102, 95103, 95104, 95105, 95111, 95112, 95113, 95114, 95115, 95117, 95118, 95119, 95121, 95122, 95124, 95129, 95130, 95131, 95132, 95133, 95150, 95153, 95156, 95157, Appendix A, and Appendix B, and proposed adoption of new sections 95160, 95161, 95162, and 95163, title 17, California Code of Regulations. The regulatory documents for this rulemaking are available online at the following ARB website:

http://www.arb.ca.gov/regact/2016/ghg2016/ghg2016.htm

The Board did not take action on the proposal at the September 2016 Board hearing. Comments received prior to, and during, the public hearing, as well as further staff analysis, are reflected in proposed modifications in this Notice. The changes are described below and are incorporated in the modified regulatory text.

The text of the modified regulatory language is shown in Attachment A. The originally proposed regulatory language is shown in strikethrough to indicate deletions and underline to indicate additions. New deletions and additions to the proposed language

that are made public with this notice are shown in double strikethrough and <u>double</u> <u>underline format</u>, respectively.

In the Final Statement of Reasons, staff will respond to comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments related to changes that are noticed. Therefore, staff will only address comments filed in this comment period that are responsive to the modifications to the originally proposed amendments that are described in this notice or identified by the double-underline and double-strikethrough formatting in Attachment A. Staff will also respond to comments relating to the documents added to the rulemaking file, as identified later in this notice.

Summary of Proposed Modifications

Staff's proposed modifications to the originally proposed amendments to sections 95101, 95102, 95103, 95104, 95111, 95112, 95113, 95114, 95115, 95119, 95121, 95122, 95124, 95130, 95131, 95132, 95133, 95152, 95153, 95156, 95157, Appendix A, and Appendix B, and proposed adoption of new sections 95160, 95161, 95162, and 95163, title 17, CCR are summarized below and attached to this notice as Attachment 1. All subsequent section references are to title 17, CCR, unless otherwise noted.

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting; nor does it include all of the non-substantive revisions made to improve clarity. For a complete account of all modifications in the originally proposed regulatory amendments, refer to the double underline and double strikeout sections of the regulation in Attachment A.

A. Modifications to Section 95101. Applicability.

Staff is proposing further edits to the cessation requirements in sections 95101(h)(1)(A)(4) and (h)(2)(A)(2) to address the reporting and verification requirements for fuel suppliers that change ownership or sale or relinquishment of an inventory position at a terminal. These changes respond to stakeholder comments seeking clarity on the fuel supplier reporting requirements. For example, with these edits, it is clarified that if a transportation fuel supplier sells its terminal position to another entity, the fuel supplier cannot sell its compliance and reporting obligations for fuel it transacted prior to the change in position holder status as part of the contractual agreement. Similar to provisions applicable to electric power entities, this requirement would ensure that the position holder at the time of the sale or transaction is responsible for data reporting and verification. Related changes concerning fuel supplier reporting obligations also appear in section 95103(n) and are described below.

B. Modifications to Section 95102. Definitions.

Staff is further proposing several MRR definitions to make clarifications and address stakeholder comments. An edit was made to the section for "global warming potential" to remove a duplicate display of the acronym GWP. Given the changes that staff is proposing to section 95105(c)(3), staff is modifying the definition for "simplified block diagram" to also apply to the diagram reporting requirements added in section 95105(c).

As the initial notice for this rulemaking explained, staff continues to work to further develop the proposed amendments relating to covered product data reporting and definitions. The set of amendments noticed for 15 days of public comment in this current proposal address some, but not all, of the matters originally noticed. Additional proposed amendments to the definitions may be issued in a second package of proposed amendments, with an additional 15-day comment period. In this notice package, consistent with this ongoing process, the definition for "Tomato soluble solids" is being modified for clarity, to include an acronym for a reference. Also, the definition of "Calyx" was modified to reflect that it is a singular word. The definitions of "Calcium Ammonium Nitrate Solution," "Nitric Acid," and "Lead and lead alloys" were modified only to eliminate text stating that staff may propose a revision to this definition after reviewing the benchmark. The definitions that existed prior to the originally proposed amendments are retained.

Based on stakeholder comment, the "Importer of fuel" definition is amended to address concerns that fuel importers could avoid a reporting obligation by disaggregating imported volumes through simple contractual changes.

Some definitions related to electric power entities are modified or restored to their previous text. The following four definitions contain changes to restore language associated with the First Point of Receipt definition: "continuous physical transmission path," "first point of receipt," "imported electricity," and "source of generation." Regarding Energy Imbalance Market (EIM), because the remaining emissions option for EIM was withdrawn, the proposed definition for "energy imbalance market purchaser" is deleted, and language in the "imported electricity" and "electricity exporter" definitions is changed to reflect the modified reporting for EIM imports and exports.

C. Modifications to Section 95103. Greenhouse Gas Reporting Requirements.

Staff is proposing edits to section 95103(a)(2) to correct an oversight and include estimation methods for methane and nitrous oxide in MRR. Section 95103(n)(2) is amended in concert with cessation of reporting and verification requirements in section 95101(h)(1)(A)(4) and (h)(2)(A)(2) to ensure consistent delineation of the emissions reporting and verification responsibilities for fuel transactions that occur prior to a change of ownership that would result with a fuel supplier no longer having reportable fuel volumes.

At this time staff is not make changes to the originally proposed verification deadline of August 1. Staff plans to hold a workshop in early 2017 to further discuss the verification deadline. As such, staff is retaining the amended language, but additional proposed amendments may be issued in a second package of proposed modified amendments, with an additional comment period based on further dialogue with stakeholders.

D. Modifications to Section 95104. Emissions Data Report Contents and Mechanism.

Based on stakeholder comments, staff is modifying section 95104(f) to clarify when a narrative description of a five percent change is required and that the description is not subject to verification.

E. Modifications to Section 95105. Record Keeping Requirements.

Staff is modifying section 95105(b) to provide sufficient time for ARB to receive and review documentation while taking into account stakeholder comments that five days does not provide enough time to gather and submit data. Section 95105(c)(3), for block diagrams, is also revised based on stakeholder comments. The revisions limit and clarify what level of detail is required in the diagrams, so the requirement is not overly burdensome, and the updates specify that the Monitoring Plan does not necessarily have to include the block diagram(s) within the plan, but that a reference to any diagrams must be included in the plan.

F. Modifications to Section 95111. Data Requirements and Calculation Methods for Electric Power Entities.

Staff is proposing several modifications to sections in 95111 to withdraw the change to the definition of "first point of receipt" which would require imported power to be disaggregated by generation source. Based on stakeholder comments, the proposed changes would have introduced some unnecessary complications for reporting unspecified power.

Staff modified section 95111(b)(2)(E)(1) to add the "entity's share of metered output" term "S_{sp}" to the lesser of analysis equation, which had been inadvertently omitted from the equation.

Some stakeholders expressed concern about the proposed language in section 95111(b)(2)(E)(1) regarding grandfathered renewable portfolio standards (RPS) contracts and the lesser of analysis. Staff needs additional information from stakeholders to understand potential data implications. As such, staff will retain the originally proposed amended language, but additional proposed amendments may be issued in a second package of proposed amendments, with an additional 15-day comment period based on additional dialogue with stakeholders.

Staff also modified section 95111(f) to delete duplicative language that also appears in the next sentence. This is not a substantive change.

Based on stakeholder comments and extensive discussions, staff is proposing to delete the initially proposed language which removed reporting requirements for the RPS adjustment in section 95111(g) beginning in 2021. Staff is proposing to keep the RPS adjustment with the existing intent and requirements and implementation post-2020.

Staff is making further changes to the reporting requirements for imported electricity from the California Independent System Operator's (CAISO) EIM to better align ARB greenhouse gas reporting and compliance obligations with the way that the EIM currently tracks electricity imports serving California.

As the 45-day notice for this package outlined, ARB is working to address these issues. The white paper titled "Analysis of the Energy Imbalance Market and Mandatory Greenhouse Gas Reporting and Cap-and-Trade Regulations," attached to this Notice as Attachment B, explains the challenge in more detail. Briefly, the EIM as currently constituted is not providing ARB or the EIM's participating members (some of which are reporting entities under MRR) all of the data necessary to support full accounting of GHG emissions emitted to the atmosphere when there is dispatch to serve California load during periods of imbalances. Specifically, the GHG bid adder system now in use does not completely identify all resources that may alter their dispatch (and, hence, their emissions) to support imports to California. As a result, though MRR accurately tracks the electricity imports identified by CAISO's current EIM system, the tracking is incomplete and additional emissions need to be accounted for to ensure accurate and complete identification and reporting of GHG emissions that result from electricity generation that serves California load.

Staff continues to work with CAISO to identify the additional types of data that would be needed to support full GHG accounting. CAISO is in the process of developing amendments to its EIM tariff and underlying tracking systems to address this issue. CAISO's proposed changes are intended to more accurately capture incremental behavior, and emissions, from power plants importing power to California in response to changes in California load. However, these proposed changes are still being developed and will not be in place during data year 2017, and potentially not during reporting year 2018.

Staff has therefore developed a solution intended to act as a bridge to support accurate accounting while a longer-term approach is being developed by CAISO staff. The

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¹ California Independent System Operator (CAISO), "Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement Straw Proposal," November 17, 2016. Accessed Dec 1, 2016: http://www.caiso.com/Documents/StrawProposal-RegionalIntegration-EIMGreenhouseGasCompliance.pdf

proposed changes are based on extensive coordination with CAISO and stakeholders, including through public workshops. The new reporting approach for EIM imported electricity requires EIM participating resource scheduling coordinators to continue reporting as they currently do under MRR and requires CAISO to report information annually to ARB that would allow ARB to calculate the amount of emissions ("outstanding emissions") to support full accounting of GHG emissions emitted to the atmosphere when there is dispatch to serve California load during periods of imbalances. The outstanding emissions will be calculated by determining the amount of electricity transferred into California by EIM, and multiplying that amount by the default emission factor ARB uses for unspecified market transactions, and then subtracting known emissions associated with specific EIM imports. This is appropriate because this factor reflects the emissions of power plants on the margin of western electricity markets and so reasonably approximates the emissions effect of marginal changes in that market in response to California demand. Based on staff's current understanding of CAISO's proposal, this calculation reasonably captures GHG emissions from EIM market operations, pending further improvements to the EIM algorithm. This data can then be used to appropriately determine compliance obligations in the Cap-and-Trade Regulation, as amendment packages for that regulation explain. Staff will continue to coordinate with CAISO and stakeholders to refine the proposed amendments.

G. Modifications to 95112. Electricity Generation and Cogeneration Units.

Based on stakeholder comments, staff is modifying section 95112(e) for geothermal facilities for clarity and readability. This is not a substantive change. In addition, staff is removing language from section 95112(i) that was added to the 45-day package in error. There is no language in the Cap-and-Trade Regulation on allocation to legacy contract generators with electrical distribution utility counterparties.

H. Modifications to Section 95113. Petroleum Refineries.

Some stakeholders expressed uncertainty about how to apply the temperature corrections to complexity weighted barrel (CWB) throughputs that were proposed in the 45-day regulatory package. Staff will continue to work with stakeholders to determine whether modifications are needed to the regulatory language or whether the uncertainty can be addressed in guidance. As such, staff will retain the amended language but additional proposed amendments may be issued in a second package of proposed amendments, with another 15-day comment period based on additional dialogue with stakeholders. In section 95113(I)(3)(A), staff changed the term "CWB" to "CWB throughputs" for clarification. The existing term "CWB" is potentially vague and could refer to individual CWB throughputs or the total facility CWB, which is calculated, in part, from individual CWB throughputs. The change is made to clarify that the CWB throughputs reported pursuant to section 95113(I)(3)(A) are covered product data and subject to the accuracy requirements of section 95103(k).

I. Modifications to Section 95114. Hydrogen Production.

Staff is not proposing changes to this section.

J. Modifications to Section 95115. Stationary Combustion.

Staff is correcting a typographical error in section 95115(c)(1) by adding the word "regulation" after "cap-and-trade." This is not a substantive change. As the initial notice for this rulemaking explained, staff continues to work to further develop the proposed amendments relating to benchmarks and product data. The set of amendments noticed for 15 days of public comment in this proposal address some, but not all, of the topics originally noticed. Additional proposed amendments may be issued in a second package of proposed amendments, with an additional 15-day comment period for operators of soda ash manufacturing facilities, operators of facilities mining or processing freshwater diatomite filter aids, operators of forging facilities, and operators of dairy product facilities.

K. Modifications to Section 95117. Lime Manufacturing.

Staff is not proposing changes to this section.

L. Modifications to Section 95118. Nitric Acid Production.

Staff is modifying section 95118(d) to eliminate reporting of the annual production amount of calcium ammonium nitrate solution beginning in 2019 for reporting 2018 data. Starting in the third compliance period of the Cap-and-Trade Program, allowance allocation will not be provided to producers of calcium ammonium nitrate solution, so the reporting of the annual production of calcium ammonium nitrate solution will no longer be required.

Reporting annual production of calcium ammonium nitrate solution through 2018 for 2017 data is retained so that staff receives all data needed to apply the equations in section 95891(b) of the Cap-and-Trade Regulation to calculate all appropriate initial allowance allocation and true-up allowance allocation for the entire second compliance period.

M. Modifications to Section 95119. Pulp and Paper Manufacturing.

As the initial notice for this rulemaking explained, staff continues to work to further develop the proposed amendments relating to benchmarks and product data. The set of amendments noticed for 15 days of public comment in this proposal address some, but not all, of the topics originally noticed. Additional proposed amendments may be issued in a second package of proposed amendments, with an additional 15-day comment period.

N. Modifications to Section 95121. Suppliers of Transportation Fuels.

Staff is not proposing changes to this section.

O. Modifications to Section 95122. Suppliers of Natural Gas, Natural Gas Liquids, Liquefied Petroleum Gas, Compressed Natural Gas, and Liquefied Natural Gas.

Staff is not proposing changes to this section.

P. Modifications to Section 95124. Lead Production.

The section was modified only to eliminate text stating that staff may propose a revision to this definition after reviewing the benchmark. Staff now proposes that the product data reporting requirements will remain unchanged for lead production.

Q. Modifications to Section 95129. Substitution for Missing Data Used to Calculate Emissions from Stationary Combustion and CEMS Sources.

Staff is not proposing changes to this section.

R. Modifications to Section 95130. Requirements for Verification of Emissions Data Reports.

Staff is not proposing changes to this section.

S. Modifications to Section 95131. Requirements for Verification Services.

Staff is proposing to correct small non-substantial formatting errors throughout this section. Staff is modifying section 95103(b)(11) to clarify that issues identified by ARB to the verifiers are also to be included in the log of issues found during verification. Sections 95131(f) and (g) are being modified to increase the number of days reporting entities and verifiers have to submit requested information. Staff originally proposed to move the deadline from 20 working days to 5 days. Based on stakeholder comment, staff now proposes 14 days for submitting information. This will provide additional time to the entities and verifiers and allow ARB sufficient time to review any documentation requested. In addition, staff is reorganizing the requirements in sections 95131(b)(12) for clarity. The language in the proposed 45-day MRR in section 95131(b)(12) was moved to new sections 95131(b)(12)(D) and (E). In addition, staff is clarifying the start date for the requirements in section 95131(b)(12)(E). Staff is also proposing minor edits to section 95131(b)(14)(B) to clarify how verifiers ensure data are accurate and conforms to the regulation.

T. Modifications to Section 95132. Accreditation Requirements for Verification Bodies, Lead Verifiers, and Verifiers of Emissions Data Reports and Offset Project Data Reports.

Staff is not proposing changes to this section.

U. Modifications to Section 95133. Conflict of Interest for Verification Bodies.

Staff is not proposing changes to this section.

V. Modifications to Section 95150. Definition of the Source Category.

Staff is proposing changes to sections 95150(a)(2) and (a)(3) to clarify the industry segment descriptions. These revisions are being made in response to stakeholder requests for clarity and do not change the meaning of the proposed industry segment descriptions.

W. Modifications to Section 95153. Calculating GHG Emissions.

Staff is not proposing changes to this section.

X. Modifications to Section 95156. Additional Data Reporting Requirements.

Staff is not proposing changes to this section.

Y. Modifications to Section 95157. Activity Data Reporting Requirements.

Staff is not proposing changes to this section.

Z. Modifications to Subarticle 6. Reporting Requirements and Calculation Methods for Electricity Generating Units Subject to the Clean Power Plan.

Staff is not proposing changes to this section. Staff continues to monitor ongoing federal litigation regarding the Clean Power Plan and will propose any changes as necessary with an additional 15-day comment period.

AA. Appendix B. Test Procedure for Determining Annual Flash Emission Rate of Methane from Crude Oil, Condensate, and Produced water. Emission Factors and Calculation Data for Petroleum and Natural Gas Systems Reporting.

Staff is not proposing further changes to the Flash Test Procedure at this time. To be consistent with other programs at ARB for which this test procedure is being amended, in concert with a scientific peer review of the procedure, staff may further amend the test procedure. Therefore, staff will retain the amended language in this notice package but additional proposed amendments may be issued in a second package of proposed amendments, with an additional 15-day comment period based on additional dialogue with stakeholders.

Staff is updating the underline formatting in section 10.5 to identify the text labels for sections (a)-(f) as newly added text. This text was not correctly identified as new text in the initial proposal. A missing period is added to the end of section 10.5(c). These changes are non-substantial.

Additional Document(s) Added to the Rulemaking File

In the interest of completeness, staff has also added to the rulemaking file and invites comments on the following documents:

- California Independent System Operator, "Regional Integration California Greenhouse Gas Compliance and EIM Greenhouse Gas Enhancement Straw Proposal," November 17, 2016. Accessed Dec 1, 2016: http://www.caiso.com/Documents/StrawProposal-RegionalIntegration-EIMGreenhouseGasCompliance.pdf.
- Air Resources Board, "Analysis of the Energy Imbalance Market and Mandatory Greenhouse Gas Reporting and Cap-and-Trade Regulations," December 21, 2016. Attached to this notice as Attachment B.

Contacts

Inquiries concerning the substance of the proposed regulation may be directed to Jim Aguila, Chief, Program Planning and Management Branch, at (916) 322-8283 or Brieanne Aguila, Manager, Climate Change Reporting Section at (916) 324-0919.

Public Comments

Written comments will only be accepted on the modifications identified in this notice and Attachment A, and on the documents added to the rulemaking file, identified above. Written comments may be submitted by postal mail or electronic submittal no later than 5:00 pm on January 20, 2017, to the following:

Postal mail: Clerk of the Board, Air Resources Board

1001 I Street, Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the two forms described above and received by ARB by 5:00 p.m., on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alterno u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

CALIFORNIA AIR RESOURCES BOARD

Richard W. Corey
Executive Officer

Date:

December 21,2016

Attachments

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see ARB's website at www.arb.ca.gov