The slide features a light blue gradient background with a darker blue wave-like pattern at the bottom. The main title is centered in a large, bold, dark red font. Below it, the subtitle is also centered in a smaller, dark red font. At the bottom center, the organization's name and date are listed in a blue font. A small logo is visible in the bottom left corner of the slide area.

**GHG Mandatory
Reporting**

**Workshop for
Potential Regulatory Updates**

California Air Resources Board
June 5, 2014

California Air Resources Board

Workshop Materials and Submitting Email Questions

Slides are posted at:

<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

Webcast link:

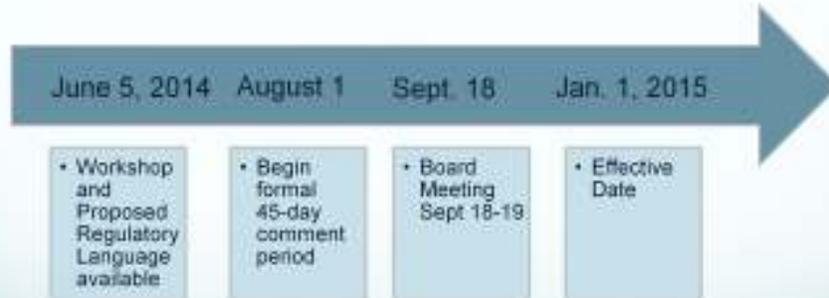
<http://www.calepa.ca.gov/broadcast/?BDO=1>

Questions during the workshop can be emailed to: sierrarm@calepa.ca.gov

Outline

- Regulatory timeline for Mandatory Reporting Regulation (MRR) and Cost of Implementation Fee Regulation (COI) amendments
- Staff's potential revisions to MRR
- Questions and Comments
- Next Steps

Regulatory Timeline for MRR and COI amendments



GHG Mandatory Reporting Regulation

Potential Amendments

MRR Overview of Potential Updates

- Updates to integrate COI reporting
- Align with Cap-and-Trade Regulation
 - Clarifications and updates for petroleum and natural gas systems reporting
 - Clarifications for product data reporting
- Minor updates and clarifications to fuel supplier requirements
- Minor updates to Electric Power Entity requirements

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As you heard previously in the COI updates, some of the main changes being proposed are to integrate the Cost of Implementation Fee Regulation data reporting requirements into the Mandatory Reporting Regulation.

In addition, staff will make clarifications to align requirements in the MRR with the Cap-and-Trade Regulation. Staff will also make minor updates to fuel supplier and Electric Power Entity requirements.

MRR – COI Integration (1)

- Purpose for COI reporting data integration:
 - Consistent and verified data, reduce complexity
- Refineries* – Require identification of produced fuel designated for use in California and reporting of oxygenate percentage for CARBOB.
- Natural Gas Suppliers* – Provide MMBtu for end-use categories (residential, commercial, industrial, electricity generators). Data currently reported as Mscf under MRR.

* Existing COI requirements for integration to MRR

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As mentioned during the Fee Regulation presentation, currently there are overlapping data reporting requirements between the Mandatory Reporting and Fees regulations. These proposed changes move all of the reporting requirements to the mandatory reporting regulation, which makes the reporting less complex and more consistent.

With the update, the Fees data will also now be subject to verifier review, as other GHG data are, which is important because the COI Fees data are used for invoicing.

In general the proposed updates do not impose “new” data reporting requirements.

For refinery reporting the existing requirement in the Fee Regulation to report oxygenate percentage and identify produced fuel that is designated for use in California has been added to MRR.

MRR changes would also include an existing Fee Regulation requirement that natural gas provided to end-users by Natural Gas Suppliers to be reported in million Btu.

MRR – COI Integration (2)

- Fuel suppliers* - Report the import quantities of CARBOB, CA gasoline, and CA diesel designated for use in CA.
- For CARBOB imports, report the designated percentage of oxygenate for blending.
- Report the quantity of biodiesel and/or renewable diesel blended in CA diesel for use in CA.

* Existing COI requirements for integration to MRR

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Fee Regulation requirements to report fuel import quantities will also be added to MRR.

Under the potential MRR amendments, importers will also provide the percentage of oxygenate for blending for CARBOB, as currently required by the fee regulation.

MRR is including a new requirement for fuel producers and importers to report the quantity of biodiesel and renewable diesel blended in California diesel for use in California. This new requirement supports both the Mandatory Reporting and the Cost of Implementation program needs.

MRR – COI Integration (3)

- Add requirement to MRR to provide billing address and official responsible for payment*
- Require conformance check of natural gas suppliers reported in Subpart A
 - Identify if natural gas was directly obtained from an interstate pipeline*

* Existing COI requirement for integration to MRR

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MRR will also include the requirement to report billing information which was already being reported under the fee regulation.

Under current MRR requirements facilities using natural gas must report who they get their gas from, and how much has been provided.

Moving forward, the potential amendments would require the verification team to conduct a risk based conformance check to make sure the reported natural gas suppliers are accurate. In addition, MRR will be modified to require reporters to explicitly identify if natural gas came directly from an interstate pipeline.

Clarifications and Updates Petroleum and Natural Gas Systems

- Text edits for clarity, correct errors and typos
- Add <50 scf exemption for equipment blowdowns
- Onshore production must now use Leak Detection method as per 95153(o) rather than choose either Leak Detection or Population Counts (may use district data)
- Add voluntary reporting of EOR steam produced via renewable methods (solar)
- Revise flare emission equations
- Clarify existing oil and gas product data reporting requirements

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Several updates have been included in the potential MRR changes to clarify reporting for petroleum and natural gas systems and correct errors or typos that were discovered.

Next, to be consistent with the U.S. EPA reporting requirements, ARB has added an exemption for small volume (<50 scf) equipment blowdowns.

Currently Onshore Production reporters have the option to use either the Leak Detection or Population counts methods to estimate fugitive emissions. For this revision we are proposing that fugitive emissions be estimated using the more quantitative Leaker and Leaker Emission Factors method. Reporters may also use data generated as part of an Air District mandated leak detection and repair program if the data meets the requirements of the MRR (as specified in section 95153(o)).

Staff is including provisions that would allow Onshore Production facilities to voluntarily report Enhanced Oil Recovery (or EOR) steam volumes generated using renewable energy sources. We recognize that several California EOR production fields use solar thermal heat to produce EOR steam and we would like to better understand the impact of the use of renewables on operations and potential fossil fuel use reductions.

There are minor updates to the flare emission equations. This was done for simplicity but does not introduce any new measurement requirements.

Finally, staff are proposing modifications to clarify existing petroleum and natural gas product data reporting requirements. These changes will specify that there are two acceptable methodologies for reporting: the first being sales records referenced to LACT meters, and the second being sales records plus inventoried amounts held onsite but not sold during the data year.

The modifications will specify that a reporting methodology cannot be changed without prior ARB approval. The changes will also specify that associated gas may be quantified using production or sales meters, and may be quantified using a representative Gas to Oil Ratio measurement.

Lastly, the changes will specify that that NGLs which are extracted from produced gas and re-injected into barrels of crude oil at the same facility, should not be reported as separate product data. Instead, these NGL's will be captured in the volume of crude oil reported by the facility. The specific modifications are not included in the proposed draft MRR language, but will be developed in consultation with stakeholders over the next month.

Product Data Reporting Refineries and Hydrogen

- Correct total complexity weighted barrel (CWB) equation to be consistent with Cap-and-Trade Regulation
- Clarify CWB calculation for fluid catalytic cracking units (FCC)
- Clarify definitions of "on-purpose hydrogen" and "by-product hydrogen"
- Clarify that "primary refinery product" does not include product that was produced by another facility
- Primary refinery product reporting would be based on actual production, not sales

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The current CWB, or Complexity Weighted Barrel, equation in the MRR is ambiguous and inconsistent with the Cap-and-Trade Regulation. We propose correcting the equation to be consistent with the Cap-and-Trade Regulation and with the original intent of MRR. This would be done by removing the "Total Refinery Input" and "Non-Crude Input" rows from Table 1 in Section 95113, and explicitly including these terms in the new CWB equation.

The current equation for calculating the CWB contribution from FCC units is presented separately from all other process units and is unnecessarily complex. We propose to simplify and clarify the CWB calculation for FCC units without changing the fundamental calculation. This would be done by integrating FCC units with all other process units in the CWB calculation, and by clarifying the correction to the CWB factor for FCC units. The coke-on-catalyst factors that are used to correct the CWB factor for FCC units would be more clearly identified in Table 1 of Section 95113. Also, coke-on-catalyst volume percent would be explicitly defined by an equation that is consistent with the definition developed by Solomon Associates.

For hydrogen, the definitions of "on-purpose hydrogen" and "by-product hydrogen" have been modified to clarify that they refer to pure molecular hydrogen gas. These proposed updated definitions would explicitly exclude atomic hydrogen, liquid hydrogen, and impurities that are not hydrogen gas.

Finally, free allocation of allowances is intended to be based upon actual production of material on-site. This fact would be clarified by excluding from primary refinery products any material that was produced at a different facility.

Sales data must be adjusted to account for inventory changes to reflect actual production. Actual production data are needed so that ARB can assess production incentives and equitability between CWB-based and primary refinery product-based benchmarks.

Clarifications and Updates Fuel Suppliers

- Clarify that enterers and in-state biofuel production facilities must report biofuel delivered outside the bulk transfer/terminal system
- Add renewable diesel as a reportable biomass-derived transportation fuel
- Clarifications to LPG reporting requirements for NGL fractionators
- Clarify how and under what circumstances natural gas suppliers should report biomethane deliveries

The draft regulation includes some minor text changes that clarify existing requirements for fuel suppliers.

The potential amendments clarify the reporting requirements for enterers of imported biofuels and in-state biofuel production facilities. In both cases, only the quantity of fuel delivered outside of the bulk transfer system is reportable.

Additionally, staff added renewable diesel fuel as a reportable biofuel in Table 2 of section 95121 to align with revisions made to the cap-and-trade regulation.

Staff also made minor text changes to clarify that only emissions from LPG products produced on-site and sold or delivered in California are reportable.

Lastly, minor revisions were made to ensure that natural gas suppliers report biomethane deliveries consistently.

Updates to Electric Power Entity Requirements

- Clarify reporting requirements for transmission loss factor of 1.0 for busbar measurement (95111(b)(2))
- Narrow applicability of meter data reporting and specify lesser of analysis (95111(g)(1)(N))
- Include reporting elements on Prohibited Use of Allocated Allowance Value – § 95892(d)(5)
 - ARB needs data on sales into CAISO to ensure that POUs purchase a sufficient number of allowances to meet the compliance obligation associated with those sales

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Staff is considering clarifying the reporting requirements to ensure that the transmission loss factor is more accurately represented when reporting busbar measured amounts of imported electricity. ARB could require EPEs to provide information to substantiate claiming a transmission line loss factor of 1.0 when deliveries are reported as measured at the busbar, or ARB could just require all deliveries to be reported using a default transmission loss factor, for example, the 1.02 factor used in the regulation for imported power not measured at the busbar. ARB is seeking input on how best to clarify these requirements while maintaining ease of reporting.

Staff has included an equation in the draft regulation that reporters would use to determine the amount of generated and scheduled power that can be reported as specified source power. Using this equation, reporters would determine the amount of power that can be reported as specified if there is a difference between the amount of electricity generated within an hour and the amount of electricity scheduled or metered into a California balancing authority within that same hour. Reporters would only be able to report the lesser of the two amounts as directly delivered specified source power.

ARB has reserved Section 95111(c)(5) of MRR to collect data on sales into CAISO to ensure that publicly owned utilities purchase a sufficient number of allowances to meet the compliance obligation associated with those sales. Staff is seeking input from stakeholders on they types of data that should be collected by ARB by POUs for sales into CAISO.

Legacy Contracts

- Specify reporting requirements for legacy contract transition assistance applicants, including:
 - Additional detail in energy flow diagrams required per 95112(a)(6)

Staff are considering some additions to reporting requirements for all facilities applying for legacy contract transition assistance under the Cap-and-Trade Regulation.

For legacy contracts, these amendments would require additional detail in the energy flow diagrams required under 95112(a)(6), including energy flows covered by legacy contracts. These details would be required each year and would help ARB identify the correct amount of transition assistance associated with the legacy contract.

Potential Additional Data for Natural Gas Transmission and Distribution

- Need for better estimates of methane leaks
- Residential, commercial and industrial gas meter counts
- Emissions related to dig-ins
 - Best available estimate
 - Number of dig-ins

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Sources of fugitive methane emissions are of growing interest, particularly since it is a short-lived climate pollutant and greater reductions could have a near-term impact on climate effects.

Based on ARB's survey conducted in 2009, meter leaks and dig-ins that breached gas pipelines resulted in emissions of nearly three quarters of a million metric tons of CO₂e from these methane leaks.

Because of the potential magnitude of the sources, ARB is interested in collecting better estimates for the leaks. The additional information will support a complete and more accurate estimate of natural gas transmission and distribution emissions in the statewide inventory and inform regulatory development.

The specific reporting requirements and methods for providing these data are not included in the proposed draft MRR language, but would be developed in a stakeholder process over the next month.

Submitting Informal Written Comments

- Submit informal comments by June 17, 2014 to the following link:
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

Additional Information

- Draft Revisions to Regulation (underline/strikeout)
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/wkshp-jun2014-mrr-draft.pdf>
- Main GHG Mandatory Reporting program page
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

- August 1, 2014: Official 45-Day comment period opens for MRR and COI regulations
- September 18-19, 2014: Board hearing to consider amendments to MRR and COI

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