GHG Reporting Kickoff Webinar for 2021 Data

JANUARY 26, 2022

SLIDES AVAILABLE HERE: https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting/training
Outline

• Overview
• General reporting and verification information
• Lessons learned from the past year
• Cal e-GGRT reporting tool updates
• Questions

This webinar focuses on facility and fuel supplier reporting. A separate webinar will be held for Electric Power Entities in early March 2022.
2020 Data Reporting Recap

• 831 reports submitted
• 515 verified
  • 100% received positive / qualified positive emissions verification statements
• Other reports not subject to verification (i.e., abbreviated reporters or retail providers with no imports/exports)
• 2020 summary data posted for all reports here:
  • https://ww2.arb.ca.gov/mrr-data
# Key Reporting Dates for 2021 Data

https://ww2.arb.ca.gov/mrr-key-dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>April 11</td>
<td>Regulatory Deadline: Reports due for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting</td>
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<tr>
<td>June 1</td>
<td>Regulatory Deadline: Reports due for electric power entities and those subject to abbreviated reporting</td>
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<tr>
<td>August 10</td>
<td>Regulatory Deadline: Verification statements due (emissions data and product data)</td>
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Reporting and Verification Schedule

• RY2021 is the first year of the compliance period. All reporting entities require a site visit
• Verification statements due by Aug. 10th, 2022
• No extensions to reporting or verification deadlines
• Failure to submit a report or verification by the required deadline is a violation of the regulation for each day the report or verification is late
COVID-19 Concerns

• CARB expects all reporting requirements will be met – the regulation has not changed as a result of COVID

• Any issues that reporters or verifiers are having in meeting MRR requirements, as a direct result of COVID, are being reviewed by CARB on an individual basis

• Reach out to CARB as early as possible
Enforcement

• Issues that could lead to enforcement
  • Incorrect data reported
  • Failure to fix correctable errors that result in an adverse statement
  • Late reports or failure to report
  • Late verification or failure to verify

• CARB has completed enforcement actions related to reporting
  • Completed MRR case settlements posted here:
    • https://ww2.arb.ca.gov/resources/documents/mrr-enforcement
General Reporting and Verification Information
Reporting Tips


• CARB guidance materials located here: https://ww2.arb.ca.gov/mrr-guidance

• Utilize other resources available on the Mandatory Reporting website: https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting

• If you think you may be eligible for cessation of reporting or verification [pursuant to section 95101(h)] or are ceasing operations [section 95101(i)], contact CARB staff before the reporting deadline so we can ensure regulatory requirements are appropriately met

• Contact CARB for any questions about requirements (ghgreport@arb.ca.gov)
  • Save and file any CARB responses as part of your GHG Monitoring Plan and provide to your verifier
Verification Essentials

• First year of a new compliance period requires a site visit

• New verification body is required every six years

• Be prepared to trace data to its origin, especially during site visit

• Ensure GHG Monitoring Plan meets the requirements of section 95105(c) and includes any additional information that would be helpful to your verifier

• Correctable errors must be fixed. If not, verifier must submit an adverse statement.

• If verifier or reporter is unsure of requirements, please contact CARB for assistance
  • Retain written/emailed guidance from CARB staff for review by your verifier
Verification Best Practices

• Initiate verification as soon as possible to allow time for revisions

• Streamline verification:
  • Execute verifier contract prior to report certification
  • Associate your report with your verifier prior to report certification
  • Provide data to verifiers ASAP
  • Site visit required. It is good practice to having a webinar prior to the site visit.
    • Be ready for questions early in the process from your verifier
  • Communicate promptly to ensure important issues are discussed early

• Start early and plan to finish early ensuring timely submittal
Regulation and Guidance Updates

• GWP update for 2021+ data years
• Guidance documents available: https://ww2.arb.ca.gov/mrr-guidance
• 2018 Regulation available: https://ww2.arb.ca.gov/mrr-regulation
GWP Updates for 2021+ Data

- Use updated GWPs for 2021+ data
  - CH4 – was 21, is now 25
  - N2O – was 310, is now 298

- Cal e-GGRT has been updated with new GWPs

- Subparts MM and W required Cal e-GGRT Workbook updates for GWP factors
  - Be sure your own calculations include the new factors

- Refer to MRR section 95102 definition for global warming potential
New Biofuels

- Notify CARB if you supply or combust fuels not specifically defined in the MRR (e.g., renewable naphtha, bio-LPG)
- See MRR Table 2-5 for the current list of reportable biomass-derived transportation fuels

Table 2-5
Blendstocks, Distillate Fuel Oils, and Biomass-Derived Fuels Subject to Reporting under section 95121

<table>
<thead>
<tr>
<th>Biomass-Derived Fuel</th>
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<tbody>
<tr>
<td>Ethanol (100%)</td>
</tr>
<tr>
<td>Biodiesel (≥99%, methyl ester)</td>
</tr>
<tr>
<td>Renewable Diesel (≥99%)</td>
</tr>
<tr>
<td>Rendered Animal Fat</td>
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<tr>
<td>Vegetable Oil</td>
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Reporting Reminders

- Don’t forget to submit and certify a generated report
- If your report won’t generate:
  - Clear all validation messages
  - Clear a pending Certificate of Representation (COR)
  - Time-out issues: Try generating your report 3-4 times, then notify CARB
- As the DR (Designated Representative), notify CARB if you will no longer serve as the DR
  - It’s the company’s responsibility to notify CARB and re-assign someone as the DR
  - We’ve had issues tracking down new personnel when the DR leaves
  - Late reporting violations do apply in such cases
- Notify CARB promptly if your facility is being sold or operational control is switching to a different operator
  - CARB will evaluate responsibility for reporting, verification, and C&T compliance
  - Can be complicated if transfer occurs during verification
Certifying and Submitting a Report

Ensure your annual emissions data report is “certified” in Cal e-GGRT
Clearing Validation Messages

Example: For electricity generating facilities, total facility electricity generation, and nameplate capacity in Subpart A must equal the sum of unit-level electricity generation and nameplate capacity in Subpart C.
Clearing a Pending COR

• When a new DR/ADR accepts their invitation, a Certificate of Representation (COR) must be signed

• An incomplete COR appears under Home tab of invitee’s account

• Report can not be certified and submitted with a pending COR
CARB Quality Assurance (QA)

• Process:
  • CARB staff complete QA checks on non-emissions errors
  • Send outreach to reporters and/or verifiers if potential errors are identified via direct email, phone call, or finding reports
    1. Spring/Summer Outreach = Reactive. To correct errors early on in the verification process
    2. January Outreach = Proactive. To prevent errors identified in prior reporting year from occurring in the new reporting year.) (New for RY2021!)
CARB QA Outreach: Finding Reports

• What are they? Excel csv files that lists QA check findings applicable for a particular reporting entity (“entity report”) or for a particular user (“user report”)

• When are they issued?
  • January: When Cal e-GGRT goes live (for proactive QA)
  • Late May: For reactive QA

• Where do I find them?
  • Entity report is uploaded into the Cal e-GGRT entity account for the relevant RY (Under Data Reporting > Select Facility > Facility or Supplier Overview: CARB ATTACHMENTS
  • User report is uploaded into the Cal e-GGRT user account. (Under My Profile > Exchange Files with CARB: DOWNLOAD FILES FROM CARB)

• How do I know when a finding report has been issued? After reports have been uploaded in Cal e-GGRT, CARB will notify reporters and verifiers associated with entities who have been issued reports.
CARB QA Outreach: Finding Reports

- Entity report is uploaded into the Cal e-GGRT entity account for the relevant RY
- User report is uploaded into the Cal e-GGRT user account.
Lessons Learned
Annual Hours of Electricity Generation

• We check gross generation divided by nameplate (max rated heat input) capacity, which gives annual total operating hours

\[
\frac{\text{Unit annual gross generation (MWh)}}{\text{Unit nameplate generating capacity (MW)}} = \text{Annual hours of operation (h)}
\]

• Often find more than a year’s worth of operation (8760 hours) reported

<table>
<thead>
<tr>
<th>Configuration Type</th>
<th>Single Unit Using Tiers 1, 2, or 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Name/ID</strong></td>
<td>test 1</td>
</tr>
<tr>
<td>Description of the Unit or Unit Aggregation</td>
<td></td>
</tr>
<tr>
<td><strong>Unit Type</strong></td>
<td>OB (Boiler, other)</td>
</tr>
<tr>
<td>Maximum Rated Heat Input Capacity</td>
<td></td>
</tr>
<tr>
<td><strong>Unit of Measure</strong></td>
<td>mmBtu/hr</td>
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**ENERGY GENERATION INFORMATION**

<table>
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<tr>
<th>Gross Generation</th>
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<tr>
<td>MWh</td>
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We check fuel input (MMBtu) divided by gross energy output (MWh), which gives unit-level heat rate (MMBtu/MWh) as a measure of efficiency.

- Keep in mind that a unit cannot produce more power than the fuel going into the unit.

- Values far outside a typical range of 7 MMBtu/mWh and 10 MMBtu/MWh receive additional scrutiny from CARB.

LPG Misreported as LPG - Propane

- Applies to importers of LPG
- If the component volumes of LPG are known, required to report by component
- If component volumes of LPG are unknown, report entire volume as LPG only
- If LPG – propane is reported by itself, then the volume is indicated as pure propane
Units Combusting Natural Gas

- Amount of fuel purchased in Subpart A (in MMBtu)

- Match closely with sum of unit-level heat inputs in Subpart C (or D)

\[
\text{CO}_2 = 1 \times 10^{-3} \times \text{Fuel} \times \text{HHV} \times \text{EF}
\]

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Biogenic %</th>
<th>Fuel (scf)</th>
<th>HHV (mmBtu/scf)</th>
<th>EF</th>
<th>Calculated Result (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>0%</td>
<td>188,000,000</td>
<td>0.001028</td>
<td>53.02</td>
<td>Use the calculated result rounded</td>
</tr>
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Units Reporting Thermal Energy

- Thermal energy disposition in Subpart A needs to match closely with total thermal output in Subpart C
- Keep in mind: total thermal output should roughly equal how much steam you use + how much steam you sell
Cogen/Bigen Units

- Total thermal output + total electricity generation should not exceed total unit heat (fuel) input(s)
- Important to double check because CARB is estimating emissions from electricity generation
Method Change Requests

• Section 95103(m) of MRR provides requirements for:
  • Temporary or permanent changes to prescribed methods
  • Alternative measurement and monitoring methods

• Contact CARB ASAP, if a method change is needed

• Submit requests as soon as possible to facilitate approval in timely manner
Cal e-GGRT Updates
Cal e-GGRT News & Reminders

• Tool is now available for 2021 data reporting: https://ww2.arb.ca.gov/mrr-tool

• Cal e-GGRT release automatically migrates 2020 data configuration to 2021 reports

• Update DR, ADR, Agents (Important!)

• Contact GHG helpdesk if you have questions regarding QA outreach
Reminder: Choosing a Verification Body

- Entities can select a verification body prior to certifying report.
- Verifiers submit conflict of interest forms electronically via Cal e-GGRT.
  - Approvals from CARB typically take less than a week.
  - New reporters must select a VB before verifier can submit COI.
The Take Home Message

• GWP update for 2021 data
• Reach out to your verifier ASAP and select them in Cal e-GGRT
• No revisions to regulation or guidance documents this year
• Lots of resources available online
• Contact CARB for additional guidance or if any issues arise (https://ww2.arb.ca.gov/mrr-contacts)
Resources

• Email reporting questions to: ghgreport@arb.ca.gov
• Email verification questions to: ghgverify@arb.ca.gov
• Reporting Guidance
  https://ww2.arb.ca.gov/mrr-guidance
• Reporter Training Presentations
  https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting/training
• Cal e-GGRT Training
  https://ww2.arb.ca.gov/mrr-tool
• Cal e-GGRT Main Help Page
  http://www.ccdsupport.com/confluence/display/calhelp/Home
• Verification Bodies
  https://ww2.arb.ca.gov/verification-bodies
# GHG Reporting Contacts

All questions can be directed to ghgreport@arb.ca.gov

<table>
<thead>
<tr>
<th>Program / Sector</th>
<th>Contact</th>
</tr>
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<tbody>
<tr>
<td>Manager – Climate Change Reporting Section</td>
<td>Syd Partridge</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Syd.Partridge@arb.ca.gov">Syd.Partridge@arb.ca.gov</a></td>
</tr>
<tr>
<td>General Reporting Requirements, Stationary Combustion, Electricity Generation</td>
<td>Maebeth Lopez</td>
</tr>
<tr>
<td>and Cogen, Miscellaneous Sectors, Cal e-GGRT Reporting</td>
<td><a href="mailto:Maebeth.Lopez@arb.ca.gov">Maebeth.Lopez@arb.ca.gov</a></td>
</tr>
<tr>
<td>Reporting Tool Registration and General Questions</td>
<td>Karen Lutter</td>
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<tr>
<td></td>
<td><a href="mailto:Karen.Lutter@arb.ca.gov">Karen.Lutter@arb.ca.gov</a></td>
</tr>
<tr>
<td>Electricity Retail Providers and Electricity Marketers</td>
<td>Abajh Singh</td>
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<tr>
<td></td>
<td><a href="mailto:Abajh.Singh@arb.ca.gov">Abajh.Singh@arb.ca.gov</a></td>
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<tr>
<td></td>
<td>Tess McDermott</td>
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<tr>
<td></td>
<td><a href="mailto:Tess.McDermott@arb.ca.gov">Tess.McDermott@arb.ca.gov</a></td>
</tr>
<tr>
<td>Fuel and CO₂ Suppliers (Transportation Fuels, Natural Gas, LPG, and CO₂)</td>
<td>Smadar Levy</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Smadar.Levy@arb.ca.gov">Smadar.Levy@arb.ca.gov</a></td>
</tr>
<tr>
<td>Petroleum Refineries, Hydrogen Plants, Oil &amp; Gas Production, and Associated</td>
<td>Djay Patel</td>
</tr>
<tr>
<td>Product Data</td>
<td><a href="mailto:Djay.Patel@arb.ca.gov">Djay.Patel@arb.ca.gov</a></td>
</tr>
<tr>
<td>Manager – Greenhouse Gas Verification Section</td>
<td>Ryan Schauland</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Ryan.Schauland@arb.ca.gov">Ryan.Schauland@arb.ca.gov</a></td>
</tr>
<tr>
<td>More contact information at:</td>
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Questions