



**CALIFORNIA**  
AIR RESOURCES BOARD

# **MRR Verifier Kickoff Webinar for 2023 Data**

**March 6, 2024**

<https://ww2.arb.ca.gov/carb-accredited-verifiers-ghg-emissions>

# Agenda

- 2022 Data Year Recap and 2023 Data Year Preview
- 2024 MRR Verifier Accreditation Training updates
- Electric Power Entities (EPE) Guidance Spotlight
- Cal e-GGRT Updates / Reminders
- Data QA Timing and Details
- Audit Findings - Updates

# 2022 Data Year Recap and 2023 Data Year Preview

# 2022 Data Reporting and Verification Recap

- 832 reports submitted
- 493 verifications
  - 100% received positive or qualified positive verification statement
  - CARB conducted 47 verification audits
- 2022 summary data posted for all reports:
  - <https://ww2.arb.ca.gov/mrr-data>

# The Verifier-only Webpage

- Link to the verifiers' webpage
  - <https://ww2.arb.ca.gov/carb-accredited-mrr-verifiers-ghg-emissions>
- Link to contact information and COI status for 2023 data:
  - [https://ww2.arb.ca.gov/sites/default/files/ghg-verifiers/verifiers/coi\\_2023.xlsx](https://ww2.arb.ca.gov/sites/default/files/ghg-verifiers/verifiers/coi_2023.xlsx)
  - User = VERIFIER;
  - Password starts with D2xxxxxxxxxxxx
    - A new password will be emailed to you in late-March

# 2022 Data Year Verification Issues

- New entities were late to contract with a VB
  - CARB will target outreach to new entities earlier, and regular outreach reminders to select VB
- Site visits scheduled too close to the verification deadline
  - CARB may choose to audit those verifications
- Issues of verifiers new to facility not spending sufficient time to understand sector-specific issues

# 9 Qualified Positive Verification Statements

- Similar to other data years, qualified positive verification statements for 2022 data were caused by:
  - Over/under REC serial reporting for specified imports [§95111(g)(1)(M)]
  - Frequency of calibration or availability of calibration data [§95103(k)]
  - Missing data > 20% of any single data element [§95131(b)(13)]

# 2024 Key Dates



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

Date	Event
<b>April 10</b>	Reporting deadline for facility operators and fuel suppliers
<b>June 3</b>	Reporting deadline for electric power entities (EPEs) and those subject to abbreviated reporting
No later than <b>July 29</b>	(14-day) Deadline for notification of possible adverse verification statement (CARB recommends much earlier notification)
<b>August 12</b>	Final verification statements and verification reports due
<b>August 12-26</b>	Verification documents for CARB audits due (within 14 days)

# MRR Regulatory Update

- Expected soon, including an update to C&T regulation
- Your feedback is important – verifiers will get workshop notice, and requests for informal comments to help shape staff's proposal
- Once Reg is effective, we will hold a comprehensive review webinar, which will be required viewing
- Past workshops for potential Cap-and-Trade amendments are at:

<https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cap-and-trade-meetings-workshops>

# Verification of 2023 Data in 2024

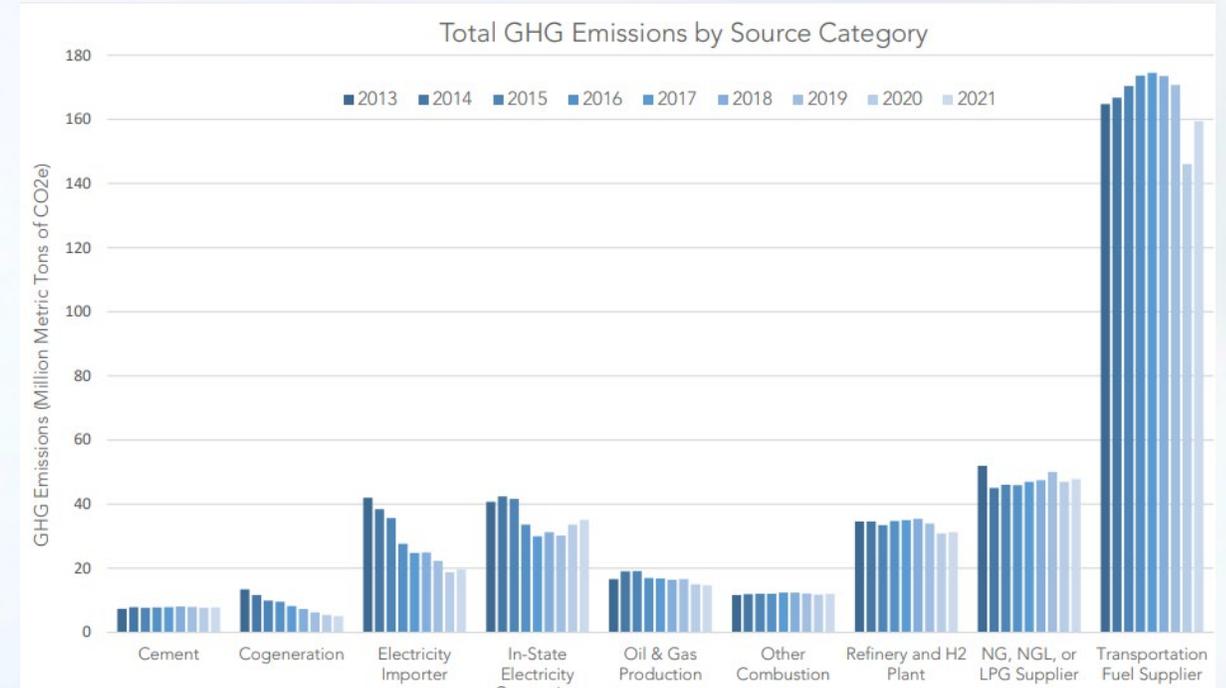
- Use 2018 MRR for 2023 data year
- Less intensive verification if same VB and received positive verification statement last year

4th C&T Compliance Period			5th C&T Compliance Period		
2021 Data	2022 Data	2023 Data	2024 Data	2025 Data	2026 Data
Full (site visit)	Less- Intensive*	Less- Intensive*	Full (site visit)	Less- Intensive*	Less- Intensive*

- If no site visit, conduct a video call with screenshare to review raw data and data queries

# 2021 California GHG Inventory

- Latest California GHG inventory is available here: [ww2.arb.ca.gov/ghg-inventory-data](http://ww2.arb.ca.gov/ghg-inventory-data)
- See yearly GHG trends and other info
- MRR data underpins most of the GHG inventory



# 2024 MRR Verifier Accreditation Training updates

# Training Updates

- CARB accepted 88 (out of 200) applicants into MRR verifier training
  - 66 individuals accredited (38 passed on first attempt, additional 28 after retake)
  - 4 new VBs, plus new sectors for existing verifiers
- General exam similar to 2020 exam, yet level of engagement from applicants and exam pass rate was much lower
  - Verifiers should reach out to CARB staff with any and all questions
  - All verifiers should review relevant regulatory sections before undertaking verifications
  - Mistakes could lead to modification, suspension, or revocation of accreditation
  - CARB will focus outreach/assistance (and oversight audits) on new verifiers

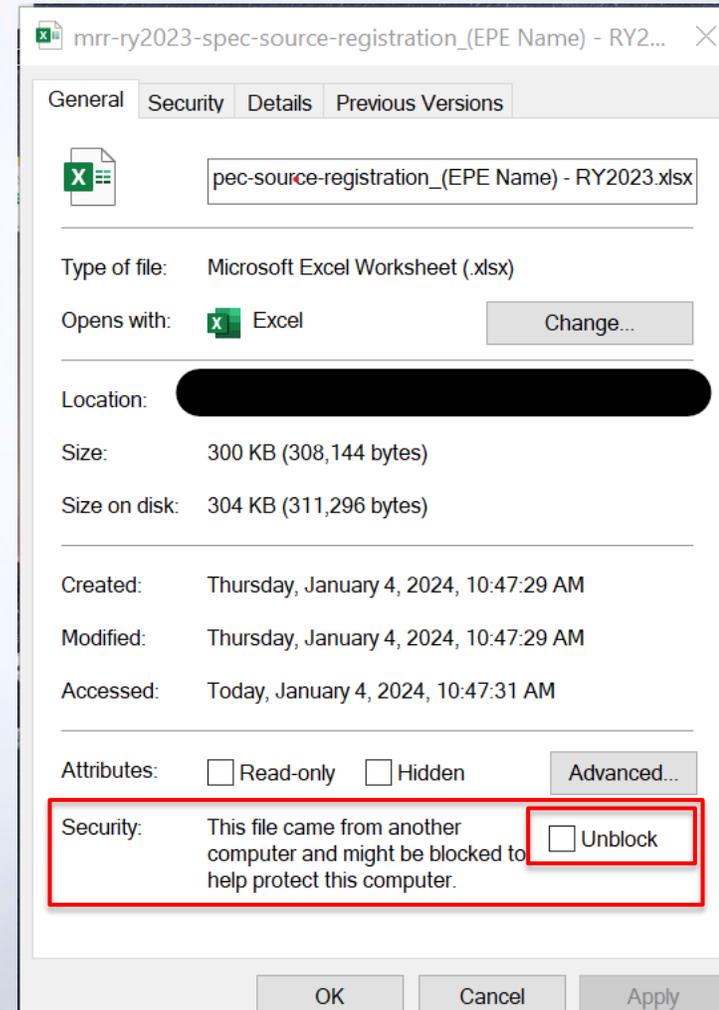
# Feedback from Training

- Significant interest in training led to many applicants not accepted
  - For your VB, what contributed to training interest?
    - Other verification/accreditation programs? Staff turnover at your VB? Something else?
  - What is your preferred format for the training?  
Remote, in-person, hybrid?
  - Timing for next training?

# Electric Power Entities (EPE) Guidance Spotlight

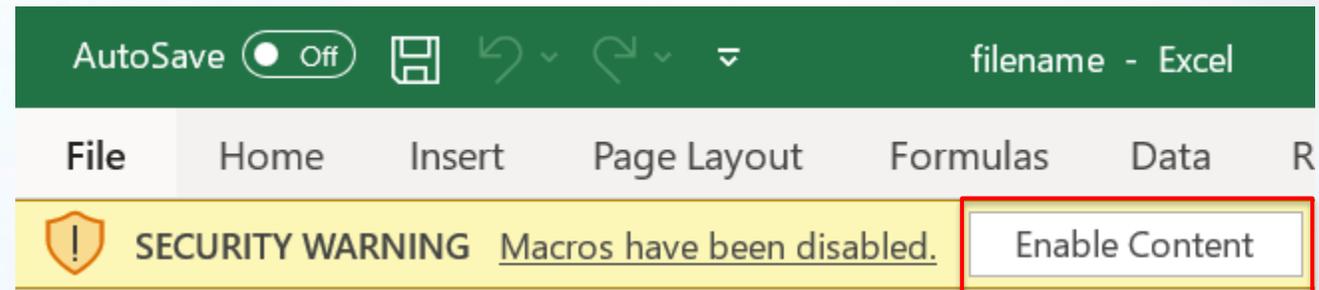
# New: Steps to Enable Workbooks

- Windows security update requires downloaded workbooks to be “unblocked” and “enabled”
- Follow these steps:
  1. After downloading the file, right-click the file and select Properties.
  2. At the bottom of the Properties window, under Attributes, check the box that says “Unblock.” (see screenshot)



# New: Steps to Enable Workbooks

3. After performing steps 1 and 2, open the file.
4. Click the "Enable Content" button in the yellow bar at the top of the spreadsheet, under the Excel toolbars.
5. **Save the file** after clicking "Enable Content."



# Energy Storage Systems (ESS) Import Reporting

- ESSs (such as batteries) are to be treated similarly to transmission hubs on the physical path for RY2023 & RY2024
  - No ESS losses or lesser of analysis are required
- RY2023 guidance and EPE workbooks will be updated and posted in March
- Any EPE needing to report ESS imports in RY2023 should contact CARB



# Cal e-GGRT Updates/Reminders

# Cal e-GGRT



- Cal e-GGRT was moved to the cloud (aka Cloud e-GGRT) hosted by Amazon Web Services
  - Slightly different URL, but users will not notice any changes
  - Goal: Faster load-times, better security, and we expect faster development time for testing new functionality
    - A few actions are still slow – let us know what you find
  - Auto-emails from caleggert.com instead of ghgreport

# New Options for Biogenic Fuels/Feed

- Subpart P now able to accept biogenic fuel with exempt emissions
  - Feedstock may also be biogenic, but until a regulatory update those emissions are covered
    - Contact CARB with questions
- New blend fuel allows percent biogenic (exempt) emissions to be reported
  - Important for 3-4 major refineries
    - No more work-arounds – use the new blend fuel

# Biogenic Emissions for H2 Production

- Subpart P now allows biogenic emissions to be reported
  - Fuel/Feedstock categories went from 6 choices to 18 choices for both exempt and non-exempt biogenic emissions
    - “Non-biogenic” was added to the facility’s fuel/feed category from last year – verifier must review these categories carefully
      - Capable of handling imported biomethane
  - The choice of fuel type in this pull-down will then dictate covered vs exempt emissions when you upload your XML file for fuel and feedstocks

Select
gaseous feedstock, non-biogenic
liquid feedstock, non-biogenic
solid feedstock, non-biogenic
gaseous fuel, non-biogenic
liquid fuel, non-biogenic
solid fuel, non-biogenic
gaseous feedstock, biogenic, exempt
liquid feedstock, biogenic, exempt
solid feedstock, biogenic, exempt
gaseous feedstock, biogenic, non-exempt
liquid feedstock, biogenic, non-exempt
solid feedstock, biogenic, non-exempt
gaseous fuel, biogenic, exempt
liquid fuel, biogenic, exempt
solid fuel, biogenic, exempt
gaseous fuel, biogenic, non-exempt
liquid fuel, biogenic, non-exempt
solid fuel, biogenic, non-exempt

Select ▼

# Blend Fuels for Biogenic Emissions

- Fuel type determines if emissions are covered vs exempt
- **Blend Fuels** now include both exempt and non-exempt fuel types
  - Several facilities will now more easily be able to report non-exempt biogenic emissions

FUEL BIOGENIC PERCENTAGE

Percentage of Fuel that is Biogenic  %

FUEL INFORMATION

Fuel Name \* HydroTreat Process Gas (RFG)

Fuel Type \* Select

CANCEL SAVE

- Select
- Other (gas)
- Other (liquid)
- Other (solid)
- Blend (gas)**
- Blend (liquid)
- Blend (solid)
- Non-Exempt Blend (gas)
- Non-Exempt Blend (liquid)
- Non-Exempt Blend (solid)

# More Options for Biogenic Emissions from CEMS

- Subpart H, P, and Y now allow non-exempt biogenic emissions to be reported for CO<sub>2</sub> CEMS
  - Available within Subparts C and D soon

ANNUAL CO <sub>2</sub> EMISSIONS MEASURED BY THE CEMS _____	
Total annual CO <sub>2</sub> mass emissions	<input type="text"/> (metric tons)
Total annual exempt biogenic CO <sub>2</sub> mass emissions	<input type="text"/> (metric tons)
Total annual non-biogenic CO <sub>2</sub> mass emissions (includes fossil fuel, sorbent, and process CO <sub>2</sub> emissions)	<input type="text"/> (metric tons)
Total annual non-exempt biogenic CO <sub>2</sub> mass emissions (includes fossil fuel, sorbent, and process CO <sub>2</sub> emissions)	<input type="text"/> (metric tons)

# Cal e-GGRT Reminders

- Ensure a “new” reporting entity associates with your VB so you can submit the COI. Can be done even if emissions data report has not yet been submitted
- Determine early in the verification if an alternative method or calibration postponement is applicable
  - Do not rely on the facility operator for confirmation of CARB approval

## SUBPART ATTACHMENTS

File Name
<a href="#">Refinery Request for Alternative Method.pdf</a>
<a href="#">Postponement Request for Refinery X.pdf</a>
<a href="#">List of Meters for Postponement Request.pdf</a>
<a href="#">CARB Approval of Postponement Request.pdf</a>
<a href="#">CARB Approval of Alternative Method.pdf</a>

# Known Cal e-GGRT “Issues” (for verifiers)

Issue	Resolution
Report not visible to verification team (no hyperlink on entity name)	99% of the time, the entity has not selected the VB in Cal e-GGRT. Ask us for assistance if needed.
Version of some annual emissions data reports (certification date at bottom of report) that was just verified is incorrect	This is a “display” system error – the correct report was verified. We are working on a fix.
Several conflict of interest validation messages are <u>disabled</u> related to VB rotation to prevent incorrect warning messages	CARB staff already monitors this in a separate system – track the timing of your own entity relationships as well, and prompt your verification client when you are required to rotate so they can hire a new VB
Additional team members are not always connected to the verification team	Remove and then re-add the team member; if applicable check the checkbox for site visit before saving

# Known Cal e-GGRT “Issues” (for entities)

Issue	Resolution
Report will not generate (times out after 10 minutes)	<p>This is mostly resolved, but if still an issue, click GENERATE again - works every time</p> 
XML errors	CARB staff re-calculates emissions and re-checks uploads every 2-3 weeks – fix expected eventually
Double GENERATE button for entity	<p>Contact CARB. Requires CARB Intervention, but now only takes 1 minute instead of 4 days (rare; ~4x/yr)</p> 
Validation message does not clear	Delete Subpart and re-enter data (rare, but usually fixable). Ask MRR staff for assistance

# Ask CARB for (Early) Assistance

- Some examples:
  - If your verification client has not yet chosen your VB in Cal e-GGRT, ask them to take action, then contact CARB if needed
  - If report revisions are delayed, ask CARB staff to send an email to the entity asking if they need assistance
  - If Data QA outreach identifies an actual data error and the entity is unable to make corrections, ask CARB to resolve
  - If you encounter a new or confusing issue, do not hesitate to ask! We always appreciate your thoughtful questions!

# COI Submittals

- User Guide for Verifiers to submit COIs in Cal e-GGRT is at: <https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-ver/coi-instructions.pdf>
- Dashboard in Cal e-GGRT shows the COI approval status, team members, site visit dates, and emission data report status
- Auto-email notification sent to lead verifier when reports are certified – requires verification team to connect with reporting entity's report
- If you need a detailed explanation about COI submittal, please refer to February 7, 2023 webinar slides 16-18 <https://ww2.arb.ca.gov/carb-accredited-mrr-verifiers-ghg-emissions>

# Verifier Contact Information Updates

- If your email address changes:
  - Update your Cal e-GGRT email address under “My Profile”
  - Send new contact information to [ghgverify@arb.ca.gov](mailto:ghgverify@arb.ca.gov)
    - Describe the change and whether it also impacts offsets / LCFS
    - CARB updates verifier information on publicly posted list of verifiers
    - CARB updates Cal e-GGRT verifier information
    - CARB updates private verifier listserve (GovDelivery)
    - CARB or VB can add/remove verifier access to VB in Cal e-GGRT for VB staffing changes
- CARB recommends someone at each VB track staff accreditations and responsibilities

# Data QA Timing and Details

# Data QA Checks

- Submit COI early so you will receive CARB email correspondence with the facility regarding potential data inconsistencies/problems
- CARB usually send QAs to entities beginning in May of each year for previous data year
- Typical QA checks include biomethane vs biogas, net vs gross generation, energy content of fuel vs energy output from steam and electricity
- Remember: Issues log must identify errors identified by the reporter, verifier, or CARB staff [§95131(b)(11)]

# Audit Findings - Updates

# Verification Good Practices

- Provide summary of data checks in verification report, and reference to complete Excel data checks with documentation and notes from lead verifier and independent reviewer
- For complicated petroleum refineries, include discrete tests, checks, and recalculations completed by verification team within verification report for each unit
- Include screen captures of key points in data acquisition and calculations to clearly demonstrate tracing data to origin
  - Best method to “convince” independent reviewer of exactly what you reviewed (plus query parameters)
- Interact with facility staff most knowledgeable about product data or transactions (not just your primary contact person).

# Verifier Nonconformances (1)

- CARB Audit Checklist:  
<https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-ver/verifiers/auditform.pdf>
- Lack of description of how identified risks in calculating covered emissions and covered product data were addressed [§95131(b)(7)(D)]
- The sampling plan was not updated and revised prior to the completion of the verification services [§95131(b)(7)(D) - (E)].

# Verifier Nonconformances (2)

- Inaccurate identification of covered emissions (vs exempt emissions) which could impact material misstatement evaluation [§95131(b)(12)(A)]
- The material misstatement evaluation did not include all covered emissions and covered product data [§95131(b)(12)(A)]
  - Exception is crude oil that requires separate evaluation for TEOR vs non-TEOR, or where products have separate units of measure
- Data checks did not include all covered product data [§95131(b)(14)]

# Verifier Nonconformances (3)

- The verification report failed to include:
  - a detailed description of data acquisition, tracking, and emission calculation/product data systems [§95131(c)(3)(A)2]
  - comparison of the data checks conducted during verification services for emissions and product data sources [§95131(c)(3)(A)4]
- Erroneously submitted a product data verification statement though no covered product data was reported [§95131(b)(12)]
- VB did not provide audit documentation within 14 days of CARB request [§95131(g)]

# Verification Opportunities for Improvement

- Sampling plan or verification report did not adequately describe tasks completed by the verification team
- Sampling plan did not include clear justification for why a data sample was chosen or how data checks were conducted
- Resolution in the issues log did not include a detailed explanation of how issue was addressed
- Specified imports contracts review were not properly documented

# Staff Contacts

- [ghgverify@arb.ca.gov](mailto:ghgverify@arb.ca.gov) for all initial questions
- [Ryan.Schauland@arb.ca.gov](mailto:Ryan.Schauland@arb.ca.gov), Manager
- [Abajh.Singh@arb.ca.gov](mailto:Abajh.Singh@arb.ca.gov)
- [Chris.Halm@arb.ca.gov](mailto:Chris.Halm@arb.ca.gov)
- [Rania.Heider@arb.ca.gov](mailto:Rania.Heider@arb.ca.gov)
- [Samir.Sleiman@arb.ca.gov](mailto:Samir.Sleiman@arb.ca.gov)
- <https://ww2.arb.ca.gov/mrr-contacts> (all MRR staff)

# Questions

