California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

GHG Abbreviated Reporting
Regulatory Requirements, Registration, and Use of Cal e-GGRT System

Revised January 16, 2019
Presentation slides available here: https://ww2.arb.ca.gov/mrr-tool
Outline

- Abbreviated reporting requirements
- New user registration and account creation in Cal e-GGRT reporting system
- Using Cal e-GGRT for abbreviated greenhouse gas reporting
- Key reporting dates and other resources
- Questions and Answers
Abbreviated Reporter Applicability

- Reportable greenhouse gas emissions must be less than 25,000 metric tons CO$_2$e (carbon dioxide equivalent) and greater than or equal to 10,000 MT CO$_2$e

- AND
  - Not a Fuel Supplier or Electric Power Entity
  - Not subject to cap-and-trade program (i.e., not an opt-in facility or due to historical emissions)
  - Not subject to U.S. EPA reporting for sectors included in CARB regulation

- See Section 95103(a) of regulation
Reporting Requirements

- Facility identification information
- Emissions data
- Fuel consumption
- Methods and data used for estimates (as applicable)
- Additional data for electricity generation and cogeneration (§95103(a)(6))
Abbreviated “Reportable Emissions”

- Must report all specified fossil fuel and biomass combustion CO₂, CH₄, and N₂O emissions
- Reportable emissions include stationary combustions emissions, as well as process emissions (e.g., from glass production, hydrogen production, iron & steel production, pulp & paper production, nitric acid production)
What Makes Reporting “Abbreviated?”

- Abbreviated reporters may use less stringent emission estimation methods
  - Default emission factors, Tier 1
  - Most will use utility bills for fuel use data

- Not subject to measurement accuracy requirements of §95103(k) or unit aggregation in §95115(h)

- GHG monitoring plan not required

- Not subject to third party verification

- More time to report - Reports due June 1st* (vs. April 10th for full reporting)

*Note: If the reporting deadline falls on a weekend or holiday, the deadline is pushed back to the next business day. So for 2018 data reported in 2019, because June 1st is a Saturday, the report is due June 3, 2019.
If future emissions exceed 25,000 metric tons
- Full reporting and meter accuracy requirements apply for entire year
- Verification required

Cessation = emissions are less than 10,000 metric tons CO$_2$e for three consecutive years
- May discontinue reporting after the three-year period
- Must notify CARB to cease reporting [§95101(h)(2)(E)]
- See §95101(h)(2) for details

Shutdown
- Must report zero emissions for 1 year
- Notify CARB [§95101(i)(1)]
- See §95101(i) for details
How to Report

Reporting is performed using the California Electronic Greenhouse Gas Reporting Tool

**Cal e-GGRT**

pronounced: Cal-Egret (like the bird)
What is Cal e-GGRT?

- Cal e-GGRT is used to report all data required by the GHG mandatory reporting regulation
- The tool contains modules for each sector required to report
- Cal e-GGRT calculates emissions based on entered fuel consumption values
- Multiple users can be associated with a single facility or entity
Registering in Cal e-GGRT

- Create Individual User Account
  - Applies to ALL users that do not have an account
  - Registration code needed
  - Initially, not associated with facility

- ARB Creates Facility Account
  - Cal e-GGRT sends Designated Representative (DR) Invitation Code to primary facility contact
  - Invitation Codes generated by the tool are used to associate users with facilities

- DR may add an Alternate DR and Agents to facility account
User Registration and DR Acceptance

START
Facility or Entity (existing or new)

ARB Assigns Designated Representative (DR) to Reporting Entity in Tool

DR Receives Invitation Code

Create New Account Using Registration Code

Yes
Login and Enter DR Invitation Code

No
Registered In Cal e-GGRT?

Submit ESA form to ARB

ARB Approves User ESA

Yes
Accept DR, ADR, or Agent Designation

ADR or Agent Receives Facility Code

The tool provides notification emails to confirm each step of the registration process

Key
User Actions
Tool Actions
ARB Actions
User Registration: Login Page
https://ww2.arb.ca.gov/index.php/mrr-tool

- Context sensitive help on every page
- If you have an account then log in here
- Otherwise, click the green NEW USER REGISTRATION button
User Registration: Account Setup

- Accept Cal e-GGRT Terms and Conditions
- Create User Profile

When filling out your profile:
- Use Registration Code
- Please provide Registration Code to any ADRs or AGENTS you assign
- Profile information will be used on the Certificate of Representation (if you are a DR or ADR) or Notice of Delegation (if you are an Agent)
Original ESA must be physically mailed to CARB
  - Must sign and date form

To speed processing
  - Email scanned copy to: ghgreport@arb.ca.gov

ARB approves ESAs for all user accounts

User cannot accept Designated Representative or other invitations until ESA approved

Users do not have access to facility account until ESA approved
User Registration: Accept Designated Representative Invitation

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A Notice from California ARB's Electronic Greenhouse Gas Reporting Tool (Cal e-GGRT)

You have been appointed to be Designated Representative for ARB Test Facility - TEST ONLY - Production Site. You were appointed by Master User on Friday, February 17, 2012.

To accept this assignment, follow these steps:
1) Login to Cal e-GGRT at [https://ssl.arb.ca.gov/Cal-eGGRT/login.do](https://ssl.arb.ca.gov/Cal-eGGRT/login.do). If you are not a Cal e-GGRT user you will need to create a user account. Click the NEW USER REGISTRATION button on the login page to begin.
2) On the homepage, find the “Accept an Invitation” panel, then copy and paste the following Invitation Code in the field provided.

**Invitation Code:** 5DEDE13E1E1F04D8586AB8834AFSA0573A

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Copy/Paste Invitation Code here
User Registration: Adding ADR and Agents

- Facility Management tab
- Use CHANGE or Add Agent buttons
User Registration: ADRs and Agents
Overview of Cal e-GGRT Operation

- Facility profile information
- Adding subparts for reporting
- Entering emissions data
- Validation messages
Facility Profile Information

- Accessed via FACILITY MANAGEMENT tab
- Completed by DR during initial account acceptance

## Facility Summary

**Cal e-GGRT FACILITY SUMMARY**

From this summary page, depending upon your role, you can make changes to the "Facility Profile" information, the facility's representatives Designated Representative (DR) and Alternate Designated Representative (ADR), and to your Agents if you are a DR or ADR.

### Facility Representatives

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated Representative</td>
<td>Patrick Gaffney</td>
</tr>
<tr>
<td>Alternate Designated Representative</td>
<td>None</td>
</tr>
</tbody>
</table>

### Facility Profile

<table>
<thead>
<tr>
<th>Physical Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001 1 Street Physical Address</td>
</tr>
<tr>
<td>Sacramento CA 95814</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mailing Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001 1 Street Mailing Address</td>
</tr>
<tr>
<td>Sacramento CA 95814</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Billing Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrick Training Facility #3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible Party for Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible Party Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible Party Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

- **Latitude:** 38.5936
- **Longitude:** -121.456244
- **County:** SACRAMENTO
- **Air Basin:** SACRAMENTO VALLEY
- **District:** SACRAMENTO METROPOLITAN AQMD
- **Owners and Operators:** Patrick

**Pending:** The Certificate of Representation has a pending change preventing further changes to the facility or supplier's representatives or profile. The new Designated Representative Mr. Patrick Gaffney must click the "Sign Certificate of Representation" link that appears on their Cal e-GGRT home page.
Data Reporting

- Use DATA REPORTING tab to report emissions and other data
Subpart A – General Information

- All reporters complete Subpart A
- Some items in Subpart A not directly applicable to Abbreviated Reporters
- Complete Subpart A to clear all Validation Messages
- Cannot generate final report with pending validation messages
Subpart A – Data Entry

- Required fields must be completed
- Validation messages triggered if incomplete

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### Sections 95100-95108 (Subpart A): Facility Reporting Information (2012)

#### Subpart A – General Information

Each facility or supplier, and for each reporting year is required to supply some basic facility level information, including the entering and reporting of relevant NAICS codes and the entering and reporting of all highest-level United States parent companies.

#### NAICS Codes

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Description</th>
<th>Relevance</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>221122</td>
<td>Electric Power Distribution</td>
<td>Primary</td>
<td></td>
</tr>
</tbody>
</table>

+ ADD a NAICS Code

#### U.S. Parent Companies

<table>
<thead>
<tr>
<th>Parent Company</th>
<th>Address</th>
<th>% of Ownership</th>
<th>Delete</th>
</tr>
</thead>
</table>

No parent companies found.

+ ADD a Parent Company

#### GHG Reporting Information

- GHG report start date: 01/01/2012
- GHG report end date: 12/31/2012

**Explanation of any calculation methodology changes during the reporting year:**

**Will you be submitting a Full or Abbreviated GHG Report?**
- Full GHG Report
- Abbreviated GHG Report

**Does this company or entity qualify for small business status?**
- Yes
- No
Subpart A – Validation Messages

- All validation must be cleared before report generation allowed
- All reporters provide electricity and natural gas purchased

**FACILITY-LEVEL VALIDATION MESSAGES**

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>ID</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Completeness</td>
<td>A624</td>
<td>You have not entered any natural gas purchases. At least one row must be entered into the Natural Gas Purchases section. If your facility did not purchase any natural gas, then select “Facility does not consume NG” as the natural gas provider name.</td>
</tr>
</tbody>
</table>

**CORPORATE PARENT VALIDATION MESSAGES**

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>ID</th>
<th>Corporate Parent Name</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Completeness</td>
<td>A510</td>
<td></td>
<td>Please identify the highest-level United States parent company as of December 31 of the current reporting year. This data is required.</td>
</tr>
</tbody>
</table>

**NAICS CODE VALIDATION MESSAGES**

<table>
<thead>
<tr>
<th>Validation Type</th>
<th>ID</th>
<th>NAICS Code</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>No NAICS code validation messages found</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Reporting: Adding Subparts

- Add or remove subparts as applicable to reporting entity
- OPEN subpart to complete data entry for each subpart
Reporting: Adding Subparts

- Select applicable subparts

- Most Abbreviated Reporters will only use Subparts A and C
  - “A” for general info
  - “C” for stationary combustion
Subpart C Reporting
Stationary Fuel Combustion
Adding a Subpart C Configuration

Two Step Process

1. Configuration Setup
   - Created once for each configuration
   - Varies by configuration type

2. Fuel Use and Emissions per Configuration
   - Reported for each fuel type combusted in a given configuration
   - Data required varies by tier and fuel type
Reporting Stationary Combustion Emissions

- Add configurations to report units
- Then OPEN configurations and OPEN subordinate levels to report emissions and fuel data
Subpart C Configurations

- Subpart C offers 6 different reporting options, known as **Configurations** in Cal e-GGRT
- Reporting options provided in 40 CFR 98.36(b)-(c)
- Abbreviated reporters will typically use those in **blue**
  - *Single Unit Using Tiers 1, 2, or 3* [98.36(b)]
  - *Aggregation of Units* [98.36(c)(1)]
  - *Common Pipe* [98.36(c)(2)]
  - Single Unit Using Tier 4 (CEMS) [98.36(b)]
  - Common Stack or Duct (CEMS) [98.36(c)(3)]
  - Alternative Part 75 Reporters [98.36(d)(2)]
Adding a Configuration

- Select appropriate configuration
- Complete descriptive information that follows
Configuration Information for Single Unit

- Select appropriate configuration type
- Provide setup information shown
- Electricity generation units require additional info when “Yes” selected
Entering Fuel and Emissions Data

- Open Unit Configuration
  - Click on “ADD a Fuel”
  - Select a fuel
  - Select a Tier
    - Most abbreviated reporters will use Tier 1
  - Add additional fuels as applicable

- Open Fuel Information
  - Select calculation method
  - Enter fuel use data
  - Enter HHV and other data as applicable (Tiers 2 or 3)
  - Tool calculates emissions based on fuel use entered
Add a Fuel

- Click on button to add fuels for configuration
- Also, complete CONFIGURATION-LEVEL data

**CONFIGURATION-LEVEL EMISSIONS INFORMATION**

<table>
<thead>
<tr>
<th>Total Exempt Biogenic CO₂ Emissions (metric tons)</th>
<th>Total CO₂ Emissions from Sorbent Usage (metric tons)</th>
<th>Status¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Complete</td>
</tr>
</tbody>
</table>

**FUEL-SPECIFIC EMISSIONS INFORMATION** (for fuels combusted at this reporting configuration)

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Calculation Period</th>
<th>Methodology</th>
<th>Status¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas (Weighted U.S. Average) (Natural Gas)</td>
<td>01/01/2012 - 12/31/2012</td>
<td>Tier 1 (Equation C-1)</td>
<td>Complete</td>
</tr>
</tbody>
</table>

¹ A status of “Incomplete” means that one or more required data elements are incomplete. For details, refer to the Data Completeness...
Entering Fuel Information

- Open fuel ①
- Enter required data ②
Check Results

- Emissions calculated by tool using fuel and EFs
- Confirm entered or calculated results
- Can be overridden, but generally not needed

<table>
<thead>
<tr>
<th>CONFIGURATION-FUEL-PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit or Group Name/ID: PG Boiler #3</td>
</tr>
<tr>
<td>Configuration Type: Single Unit Using Tiers 1, 2, or 3</td>
</tr>
<tr>
<td>Fuel (Fuel Type): Natural Gas (Weighted U.S. Average) (Natural Gas)</td>
</tr>
<tr>
<td>Reporting Period: 01/01/2011 - 12/31/2011</td>
</tr>
</tbody>
</table>

**EQUATION C-1 SUMMARY AND RESULT**

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

Hover over an element in the equation above to reveal a definition of that element.

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Fuel (scf)</th>
<th>HHV (mmBtu/scf)</th>
<th>EF</th>
<th>Calculated Result (metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO(_2)</td>
<td>500,000,000</td>
<td>0.001028</td>
<td>53.02</td>
<td>27.252</td>
</tr>
</tbody>
</table>

What CO\(_2\) result do you want to report to CARB?
- Use the calculated result rounded
- Enter my own result (value will be rounded)

**EQUATION C-8 SUMMARY AND RESULTS**

\[ \text{CH}_4 \text{ or N}_2\text{O} = 1 \times 10^{-3} \times \text{Fuel} \times \text{HHV} \times \text{EF} \]

Hover over an element in the equation above to reveal a definition of that element.

<table>
<thead>
<tr>
<th>Emission Type</th>
<th>Fuel (scf)</th>
<th>HHV (mmBtu/scf)</th>
<th>EF</th>
<th>Calculated Result (metric tons)</th>
<th>Metric Tons of CO(_2)e</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH(_4)</td>
<td>500,000,000</td>
<td>0.001028</td>
<td>0.001</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>N(_2)O</td>
<td>500,000,000</td>
<td>0.001028</td>
<td>0.0001</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

What CH\(_4\) result do you want to report to CARB?
- Use the calculated result rounded
- Enter my own result (value will be rounded)

What N\(_2\)O result do you want to report to CARB?
- Use the calculated result rounded
- Enter my own result (value will be rounded)
Biogenic Emissions

- Beginning in 2018, Cal e-GGRT calculates biogenic CO₂ based on fuels selected and biogenic fraction entered for mixed fuels, such as tires and MSW.
If using Tier 2 or Tier 3 methods:

- Generally not for abbreviated reporters
- CARB requires reporting of additional information
- Complete and upload required spreadsheets available in tool
Data Validation and Report Submittal
Data Validation

- Tool provides data validation
- Most messages must be cleared before report submittal
- Clicking on message brings you to where the issue occurred
Emission Roll-ups

- Cal e-GGRT calculates emissions totals for each subpart and aggregates subpart totals into facility or supplier totals.

- Annual emissions calculated from each applicable subpart, for each of the following GHGs (in metric tons of each gas):
  - CO₂ (excluding biogenic CO₂)
  - Biogenic CO₂
  - CH₄ (and CH₄ converted to CO₂e)
  - N₂O (and N₂O converted to CO₂e)

- The subpart totals are rolled-up into the following facility totals:
  - Total CO₂e for all sources and all GHGs (includes N₂O and CH₄) except of biogenic CO₂
  - Biogenic CO₂ from all sources
  - Emissions for fuel supplier categories
  - Emissions for Electric Power Entities
Emissions Checks Before Submitting Reports

- Reality-check data
- Review overall magnitude of emissions
  - Do totals look okay?
- Make sure fuel units (mmBtu, Therms, scf, etc.) are correct for method selected
- Generate full report and check inputs and other data
Generating Report

- After ALL critical validation messages are cleared, GENERATE/SUBMIT button activates
- Generate report and review inputs and data

SUBPART ATTACHMENTS

<table>
<thead>
<tr>
<th>Uploaded File Name</th>
<th>Subpart</th>
<th>Uploaded By</th>
<th>Uploaded Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy of De Minimis Emissions.xls</td>
<td>A</td>
<td>Katrina Luther</td>
<td>October 2, 2012</td>
</tr>
<tr>
<td>Equation C-2b (CC) Calculation Spreadsheet.xls</td>
<td>C</td>
<td>Katrina Luther</td>
<td>December 26, 2012</td>
</tr>
</tbody>
</table>

SUBMIT ANNUAL REPORT

If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report.

<table>
<thead>
<tr>
<th>Report</th>
<th>Uploaded File Name</th>
<th>Status</th>
<th>Submitted Date</th>
<th>Certification Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 Annual Report v1</td>
<td>Ready for review</td>
<td></td>
<td></td>
<td>GENERATE / SUBMIT</td>
</tr>
</tbody>
</table>
After all checks complete, SUBMIT/CERTIFY the report

This LOCKS the report and it can no longer be edited
Report Completion

- Once the report is submitted, Cal e-GGRT will send a confirmation email to the DR and others on the account.
- Report submittal **locks** the report so data cannot be edited without CARB intervention.
- Generated reports remain accessible in system.
- Recommend printing and archiving generated report and any associated data.
Helpful Websites

- Email reporting questions to: ghgreport@arb.ca.gov

- Reporting Guidance: Applicability, Metering
  https://ww2.arb.ca.gov/mrr-guidance

- Cal e-GGRT Tool Training: Registration, Subparts
  https://ww2.arb.ca.gov/mrr-tool

- Cal e-GGRT Main Help Page
  http://www.ccdsupport.com/confluence/display/calhelp/Home
Some Emissions Terminology

- **Total CO₂ emissions**
  - Measured or calculated value of CO₂ that includes both biogenic and non-biogenic emissions

- **Fossil fuel CO₂ emissions**
  - CO₂ emissions from fossil fuels
  - Fossil fuel portion of CO₂ from fuels with a fossil and biomass component (i.e. MSW and tires)

- **Biogenic CO₂ emissions**
  - CO₂ emissions from biomass fuels (wood, biogas, etc.)
  - Biogenic portion of CO₂ from fuels with a fossil and biomass component (e.g., municipal solid waste and tires)

- **Non-Biogenic CO₂ emissions**
  - CO₂ emissions from fossil fuels
  - Any N₂O or CH₄ combustion emissions
  - Sorbent CO₂
  - Process CO₂
  - Fossil fuel fraction of CO₂ from fuels with a fossil and biomass component (e.g., municipal solid waste and tires)
# Key Reporting Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Cal e-GGRT activated for the reporting year</td>
</tr>
<tr>
<td>February 1</td>
<td>Registration deadline for electric power entities (EPE) to register specified source facilities and units.</td>
</tr>
<tr>
<td>April 10</td>
<td>Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting</td>
</tr>
<tr>
<td><strong>June 1</strong></td>
<td><strong>Regulatory deadline: Reporting deadline for electric power entities and entities subject to abbreviated reporting</strong></td>
</tr>
<tr>
<td>July 15</td>
<td>Deadline for corrections to RPS Adjustment data required for electric power entity data reports</td>
</tr>
<tr>
<td>August 10*</td>
<td>Final verification statements due (emissions data and product data)</td>
</tr>
</tbody>
</table>

*If a date listed above falls on a Saturday, Sunday, or holiday, the due date is modified to the first business day after the listed date. For reporting of 2018 data in 2019, this means that the reporting deadline for EPEs and abbreviated reporters will be June 3rd, and the verification deadline will be August 12th.*
<table>
<thead>
<tr>
<th>Subject Matter</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG Mandatory Reporting (General)</td>
<td>Syd Partridge, Manager 916.445.4292</td>
</tr>
<tr>
<td>Reporting Tool Registration and General Questions</td>
<td>Karen Lutter 916.322.8620</td>
</tr>
<tr>
<td>Electricity Retail Providers and Electricity Marketers</td>
<td>Wade McCartney 916.327.0822</td>
</tr>
<tr>
<td>Fuel and CO₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO₂</td>
<td>Smadar Levy 916.324.0230</td>
</tr>
<tr>
<td>Greenhouse Gas Report Verification</td>
<td>Ryan Schauland, Manager 916.324.1847</td>
</tr>
<tr>
<td>Program Planning and Management Branch</td>
<td>Brieanne Aquila, Chief 916.324.0919</td>
</tr>
</tbody>
</table>