



California Electronic Greenhouse Gas Reporting Tool

## Reporting for Subparts H, N, AA, Q, V, S Process Emissions and Product Data

*Cement Production, Glass Production, Pulp and Paper Manufacturing, Nitric Acid Production, Lime Manufacturing, Iron and Steel Production*

March 20, 2012

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

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## Outline

- Registration and Tool Overview
- Subpart C Overview – Stationary Combustion
- Reporting Process Emission Sources
  - Summary emissions data
  - Product data
  - Detail data
  - Sources with CEMS (tool demo)
  - Sources without CEMS (tool demo)
  - Q&A

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## Training Resources

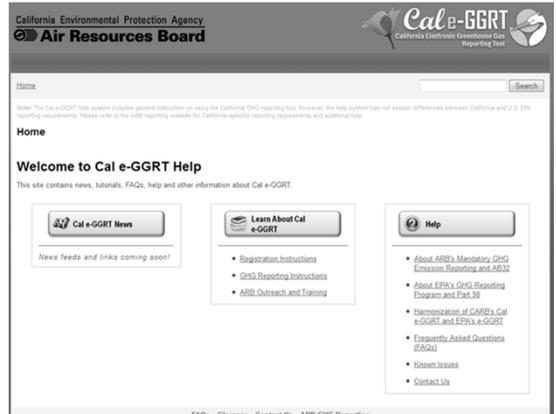
- Reporting Guidance: Applicability, Metering  
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>
- Tool Training: Registration, Subparts  
<http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>
- Cal e-GGRT Main Help Page  
<http://www.ccdsupport.com/confluence/display/calhelp/Home>
- U.S. EPA Detailed Sector Training Slides  
<http://www.epa.gov/climatechange/emissions/training.html>  
(use as a supplement to ARB summary slides)

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## Cal e-GGRT Help

<http://www.ccdsupport.com/confluence/display/calhelp/Home>



California Environmental Protection Agency  
**Air Resources Board**

Home

Welcome to Cal e-GGRT Help

This site contains news, tutorials, FAQs, help and other information about Cal e-GGRT

- Cal e-GGRT News  
News feeds and links coming soon!
- Learn About Cal e-GGRT
  - Registration Instructions
  - GHG Reporting Instructions
  - ARB Outreach and Training
- Help
  - About ARB's Mandatory GHG Emissions Reporting and ASB2
  - About EPA's GHG Reporting Program and Part 98
  - Harmonization of CARB's Cal e-GGRT and EPA's e-GGRT
  - Frequently Asked Questions (FAQs)
  - Known Issues
  - Contact Us

FAQs - Glossary - Contact Us - ARB GHG Reporting 4

## What is Cal e-GGRT?

- The *California Electronic Greenhouse Gas Reporting Tool* (Cal e-GGRT) is used to report all data required by the California GHG mandatory reporting regulation
- Contains specialized modules for each sector required to report
  - Also includes modules for Fee Regulation and SF<sub>6</sub>
- Multiple users may be associated with a single facility or entity
- Verifiers may be associated with facilities for data review purposes

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## Registering in Cal e-GGRT

- Before using Cal e-GGRT, it is necessary to perform **NEW USER REGISTRATION**
  - Applies to ALL users, even if previously reported to ARB
- Registration is separate from U.S. EPA registration
- ARB approves Electronic Signature Agreement (ESA) before users can accept Invitation Codes
- Cal e-GGRT sends DR Invitation Codes to primary managers to begin associate with facilities
- Users may be Designated Representatives (DRs), Alternate DRs, and Agents
- Contact [ghgreport@arb.ca.gov](mailto:ghgreport@arb.ca.gov) if NEW reporting account needed

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## User Registration: Login Page

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

Context sensitive help on every page

ARB Home | Contact Us Cal e-GGRT RY2011 R.48 | U41-1 7

## User Registration: Adding ADR and Agents

- Facility Management tab
- Use CHANGE or Add Agent buttons

Initiate changes here for DR, ADR, & Agents

California Environmental Protection Agency  
Air Resources Board  
ARB Test Facility - TEST ONLY - Production Site  
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  
Designated Representative Patrick Gaffney [CHANGE] Certificate of Representation Signed and Complete: No further action is required by the facility representatives.  
Alternate Designated Representative Karen Lutter [CHANGE] Agent (for this facility) none appointed  
Facility Profile  
Physical Address ARB Test Facility - TEST ONLY - Production Site ARB Street Sacramento CA 95814 [EDIT]

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## Reporting: Facility Profile and Data Reporting

- Use the Facility Management tab to enter Facility Profile data
- Use Data Reporting tab to report other data

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Cal e-GGRT Reporting Tool

HOME FACILITY MANAGEMENT DATA REPORTING

Cal e-GGRT Help  
General Reporting Information

**e-GGRT Greenhouse Gas Data Reporting**  
Select Facility

**ANNUAL GHG DATA REPORTING**  
You must select a facility to begin using any Data Reporting features, which include: Specifying which subpart the facility will be reporting, entering or updating corporate parent information (subpart A), entering GHG data and viewing validation reports, and lastly, preparing and submitting the Annual Report to ARB.

REPORTING FACILITIES	Annual Report Status	Facility Overview
ARB ID Facility or Supplier 099999 ARB Test Facility - TEST ONLY - Production Site (Sacramento, CA)	Not generated	<a href="#">OPEN</a>

**FACILITIES NOT REPORTING IN 2011:**

ARB ID	Facility or Supplier	Annual Report Status	Facility Overview
No facilities found.			

**OPEN Facility Overview to begin entering data**

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## Reporting: Adding Subparts

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

ARB Test Facility - TEST ONLY - Production Site (2011)  
**Cal e-GGRT Greenhouse Gas Data Reporting**  
Select Facility - Facility or Supplier Overview

**FACILITY OR SUPPLIER OVERVIEW**  
This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.  
After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).

CO<sub>2</sub> equivalent emissions (including biogenic) from subparts C - HH (metric tons)

Biogenic CO<sub>2</sub> emissions from subparts C - HH (metric tons)

CO<sub>2</sub> equivalent quantity from supplier categories (metric tons)

**REPORT DATA:**

9511 Reporting Source or Supplier Category	Validation Messages?	Subpart Reporting
Sections 95100-95108 (Subpart A)—General Information	View Messages	<a href="#">OPEN</a>
Sections 95115, 95112 (Subpart C)—Stationary Fuel Combustion	View Messages	<a href="#">OPEN</a>
Section 95113 (Subpart Y)—Petroleum Refineries	View Messages	<a href="#">OPEN</a>

[ADD OR REMOVE SUBPARTS](#)

**SUBPART ATTACHMENTS**

Uploaded File Name	Subpart	Uploaded By	Uploaded Date
No subpart attachments			

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## Reporting: Adding Subparts

- Select applicable subparts

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EPA SUBPARTS D - AA

- 95112 (Subpart D)—Acid Rain Program EGU Description (SHOW | HIDE)
- 95110 (Subpart H)—Cement Production Description (SHOW | HIDE)
- 95116 (Subpart N)—Glass Production Description (SHOW | HIDE)
- 95114 (Subpart P)—Hydrogen Production Description (SHOW | HIDE)
- 95120 (Subpart Q)—Iron and Steel Production Description (SHOW | HIDE)
- 95117 (Subpart S)—Lime Manufacturing Description (SHOW | HIDE)
- 95118 (Subpart V)—Nitric Acid Production Description (SHOW | HIDE)
- 95150-95157 (Subpart W)—Oil and Natural Gas Systems  
Not currently available for selection. Description (SHOW | HIDE)
- 95113 (Subpart Y)—Petroleum Refineries Description (SHOW | HIDE)
- 95119 (Subpart AA)—Pulp and Paper Manufacturing Description (SHOW | HIDE)

GENERAL STATIONARY FUEL COMBUSTION

- 95115, 95112 (Subpart C)—Stationary Fuel Combustion Description (SHOW | HIDE)

SUPPLIER CATEGORIES

- 95121 (Subpart MM)—Suppliers of Petroleum Products Description (SHOW | HIDE)
- 95122 (Subpart NN)—Suppliers of Natural Gas and Natural Gas Liquids Description (SHOW | HIDE)
- 95123 (Subpart PP)—Suppliers of Carbon Dioxide Description (SHOW | HIDE)

ARB 32 COST OF IMPLEMENTATION FEE REGULATION

- 95201-95207—ARB 32 Cost of Implementation Fee Regulation Description (SHOW | HIDE)

SFG GAS INSULATED SWITCHGEAR

- 95250-95259—SFG Gas Insulated Switchgear Description (SHOW | HIDE)

ELECTRIC POWER ENTITIES

- 95111—Electric Power Entities  
Not currently available for selection. Description (SHOW | HIDE)

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## Subpart A

- Applies to all reporters
- Includes info for electricity generators
- Report electricity and natural gas purchases
- De minimis emissions

ARB Test Facility - TEST ONLY - Production Site (2011)  
**Sections 95100-95108 (Subpart A): Facility Reporting Information**  
Select Facility - Facility or Supplier Overview - Subpart A

**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.

[Subpart A: View Validation](#)

**NAICS CODES**

NAICS Code	Description	Relevance	Detail
No NAICS codes found.			

[ADD a NAICS Code](#)

**U.S. PARENT COMPANIES**

Parent Company	Address	% of Ownership	Detail
No parent companies found.			

[ADD a Parent Company](#)

GHG report start date: 01/01/2011

GHG report end date: 12/31/2011

Explanation of any calculation methodology changes during the reporting year:

EPA e-GGRT ID:

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

Do reported emissions include emissions from a cogeneration unit?  
 Yes  
 No  
 Not applicable because I am a supplier

**ELECTRICITY GENERATION**

Does this facility have the capacity to generate electricity?  
 Yes  
 No

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## Additional Data Reporting

- ARB requires additional product data and CBI data deferred by U.S. EPA
- Cal e-GGRT supports reporting all required data, and is harmonized with the ARB regulation
  - Product data
  - Equation inputs, such as monthly HHV data or carbon content data
  - Additional identification of biogenic emissions
  - Additional information for electricity generation or cogeneration facilities

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## Subpart C Reporting

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## Stationary Combustion Emissions Subpart C

- Report emissions from stationary fuel combustion sources under the subpart C module
- Exceptions to reporting under Subpart C
  - Units exempted from reporting combustion emissions under 40 CFR 98.30(b) (e.g., portable equipment, ag. pumps, etc.)
  - Electricity generating units subject to subpart D
  - **Combustion units identified in another subpart that exhaust combined combustion and process emissions through a CEMS** (e.g. cement kilns with combined process and combustion emissions measured by a CEMS are reported under Subpart H)
  - Combustion activities calculated as specifically identified within another subpart

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## Adding a Subpart C Configuration

- Two Step Process
  1. Configuration Setup
    - Performed once for each configuration
    - Details vary configuration type
  2. Fuel Use and Emissions per Configuration
    - Report for each fuel combusted in a given configuration
    - Inputs vary by tier and fuel type (default EFs, HHV data, etc.)

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## Reporting: Subpart C Stationary Combustion

Subpart C Overview

Click "Add a Configuration"

Select Configuration Type and "Next"

Input Configuration ID Info And "Save"

Configuration Overview

ARB Test Facility - TEST ONLY - Production Site (2011)  
**95115, 95112 (Subpart C) - Stationary Fuel Combustion**  
Subpart C Overview

**OVERVIEW OF SUBPART C REPORTING REQUIREMENTS**  
Subpart C requires affected facilities to report annual carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) emissions from each stationary combustion unit. First, use this page to identify each stationary combustion reporting configuration (reporting options listed in §98.36) and then enter emissions information required by subpart C for each configuration.

For additional information about subpart C reporting, please use the Cal e-GGRT Help link(s) provided.

**CONFIGURATION SUMMARY**

Configuration Name or ID	Configuration Type	Status <sup>1</sup>	Open	Delete
PG Single Unit	Single Unit Using Tiers 1, 2, or 3	Incomplete	OPEN	✖
PG Boiler #3	Single Unit Using Tiers 1, 2, or 3	Incomplete	OPEN	✖

+ Add a Configuration

← Facility Overview

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# Process Emissions

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## Process Emissions

- Occur as the result of chemical reactions and other non-combustion activities
- Separately calculated and reported
  - UNLESS, measured using CEMS that also measures combined combustion emissions
- Requires separate reporting within tool
- Upload spreadsheets with detailed process emissions calculation data

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## Reporting: Subparts H, N, AA, Q, V, S

Cement Production, Glass Production, Pulp and Paper Manufacturing, Nitric Acid Production, Lime Manufacturing, Iron and Steel Production

- ARB and EPA reporting are very similar for these sectors
  - ARB requires additional product data and supporting data spreadsheets
- Refer to U.S. EPA Training Slides
  - <http://www.epa.gov/climatechange/emissions/training.html>
- U.S. EPA training slides are much more comprehensive and include detailed notes
- Presentation focuses on ARB and EPA reporting *differences*

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## Cement Summary Information

- Enter Summary information
- Includes product data

ARB Test Facility - TEST ONLY - Production Site (2011)  
Section 95110 (Subpart H): Cement Production  
Subpart Overview

**OVERVIEW OF SUBPART REPORTING REQUIREMENTS**  
Subpart H requires affected facilities to report carbon dioxide (CO<sub>2</sub>) from each cement kiln. First, use this page to identify each cement kiln and then enter greenhouse gas (GHG) data required by Subpart H for each cement kiln and for your facility. Summary information section is just for non-CEMS related kiln emissions. For additional information about Subpart H reporting, please use the Cal e-GGRT Help link(s) provided.

Subpart H Summary Information for this facility

# of Cement Kilns	# of Operating Cement Kilns	CO <sub>2</sub> (metric tons)
		<a href="#">OPEN</a>

**CEMENT KILN SUMMARY (Cement kilns NOT monitored by CEMS)**

Name/ID	Status*	Delete
No units have been added		

ADD a Cement Kiln

**CEMENT KILN SUMMARY (Cement kilns monitored by CEMS)**

Name/ID	Status*	Delete
No units have been added		

ADD a Cement Kiln Monitored by CEMS

[Facility Overview](#)

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## Cement Summary Information

- If using CEMS, leave process emissions blank
- List if more than 3 substitutes

Patrick Training Test Facility (2011)  
Section 95110 (Subpart H): Cement Production  
Subpart Overview - Subpart H Summary Information

**SUBPART H SUMMARY INFORMATION FOR THIS FACILITY**  
Subpart H requires a facility to report the facility information described below. For additional information about the facility information required by Subpart H, please use the Cal e-GGRT Help link(s) provided.

**EQUATION H-1 SUMMARY AND RESULT (for kilns NOT monitored by CEMS)**

$$CO_2(CMF) = \sum_{m=1}^k CO_2(CO_{2,m}) + CO_2(m)$$

Annual CO<sub>2</sub> process emissions from cement manufacturing (if applicable) (metric tons)

Use Subpart H equation spreadsheets to calculate (for kilns not monitored by a CEMS)

**CEMENT SUBSTITUTE #3**

Annual Cement substitute consumed by the Facility: \_\_\_\_\_ short tons

Cement Substitute Type: \_\_\_\_\_

**ADDITIONAL CEMENT SUBSTITUTE**

Total Quantity of Other Cement substitute consumed by the Facility: 567 short tons

Cement Substitute Type: Substitute A, Substitute B, Substitute C

**EQUATION SPREADSHEET ATTACHMENTS**

Please attach the three completed Subpart H calculation spreadsheets you used to calculate above:

- Equation H-1 Calculation Spreadsheet.xls
- Equation H-2, H-3, H-4 Calculation Spreadsheet.xls
- Equation H-5 Calculation Spreadsheet.xls

Uploaded File Name: \_\_\_\_\_ Attached by: \_\_\_\_\_

**TOTAL NUMBER OF KILNS**

Number of kilns: \_\_\_\_\_

Number of operating kilns: \_\_\_\_\_

**ANNUAL PRODUCTION AND CONSUMPTION QUANTITIES**

Annual Cement production for the Facility: \_\_\_\_\_ short tons

Annual Clinker production for the Facility: \_\_\_\_\_ short tons

Annual Clinker consumed by the Facility: \_\_\_\_\_ short tons

Annual Limestone consumed for blending: \_\_\_\_\_ short tons

Annual Gypsum consumed for blending: \_\_\_\_\_ short tons

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## Cement Reporting Using CEMS

- Add a cement kiln
- Add a CEMS monitoring location
- Continue checking "View Validation" to complete all data

**CEMENT KILN SUMMARY (Cement kilns monitored by CEMS)**

Name/ID	Status*	Delete
PG Cement Kiln - CEMS	Complete	<a href="#">OPEN</a> ✖

ADD a Cement Kiln Monitored by CEMS

**CEMS MONITORING EMISSIONS DATA**

CML Name/Identifier	CML Configuration	Monitored Unit(s)	Total CO <sub>2</sub> emissions (metric tons)	Status	Delete
PG - Primary Kiln Stack	Process/stationary combustion units share common stack	PG Cement Kiln - CEMS	200,000	Complete	✖

ADD a CEMS Monitoring Location

[Facility Overview](#)

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## Cal e-GGRT Online Tool Demonstration Using CEMS

- Adding subpart
- Entering Summary and Product data
- Adding unit monitored by CEMS
- Checking Validation Messages
- Questions

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## Pulp and Paper Summary Information

- Enter Summary information
- Includes product data

## Pulp and Paper: Non-CEMS Makeup Chemical & Furnace

- Enter Summary information
- Includes product data

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## Uploading Required Supporting Data

- Cal e-GGRT requires upload of additional supporting data that is not required by U.S. EPA
- Must upload spreadsheet if provided
- Validation errors triggered if not included

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## Glass Product Data

- Provide data shown
- Necessary to complete report

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## Cal e-GGRT Online Tool Demonstration Non-CEMS

- Adding subpart
- Entering Summary and Product data
- Adding non-CEMS information
- Checking Validation Messages
- Questions

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## Data Validation

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

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## Key Reporting Dates

- See **Key Dates** web page for specific dates applicable to reporting year
- <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep-dates.htm>
- Actual Reporting Dates may differ from dates specified in the regulation if the specified dates fall on a Saturday, Sunday, or Holiday
- **Key Dates** page is updated annually with required submission dates

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## GHG Reporting Contacts

Subject Matter	Contact
GHG Mandatory Reporting (General)	Dave Edwards, Manager 916.323.4887
Reporting Requirements, Stationary Combustion, Other Sectors (cement, glass, pulp and paper, etc.)	Patrick Gaffney 916.322.7303
Reporting Tool Registration and General Questions	Karen Lutter 916.322.8620
Electricity Generation and Cogeneration Facilities	Anny Huang 916.323.8475
Electricity Retail Providers and Electricity Marketers	Wade McCartney 916.327.0822
Fuel and CO2 Suppliers - Transportation Fuels, Natural Gas, LPG, CO2	Byard Mosher 916.323.1185
Petroleum Refineries, Hydrogen Plants, Oil & Gas Production	Byard Mosher 916.323.1185
Greenhouse Gas Report Verification	Renee Lawver, Manager 916.322.7062
Chief – Greenhouse Gas Emission Inventory Branch	Richard Bode, Chief 916.323-8413

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## For More Information

- GHG Reporting Website
  - <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>
- See website for:
  - Regulation reporting guidance and fact sheets
  - Reporting tool information
  - “Clean” copy of the regulation  
(no underline/strikeout)
- Email reporting tool questions to:  
[ghgreport@arb.ca.gov](mailto:ghgreport@arb.ca.gov)

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