California Electronic Greenhouse Gas Reporting Tool

Reporting for Subpart C and Subpart D

Stationary Fuel Combustion Sources
and
Electricity Generation and Cogeneration Units

March 8, 2012

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

Outline

- When to Use Subpart C and D Modules
- Subpart C Reporting
  - Adding configurations, fuels, emissions
  - Data validation
  - Tool demonstration
- Subpart D Reporting
- Resources
- Q&A

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)

Cal e-GGRT Help

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

What is Cal e-GGRT Used For?

- Cal e-GGRT is the system used to report all data required by the GHG mandatory reporting regulation
- The tool contains modules for each sector required to report
  - Also includes modules for Fee Regulation and SF_6
- Multiple users can be associated with a single facility or entity
- Verifiers can be associated with facilities and entities in the tool for data review purposes

When to Use Subpart C Module

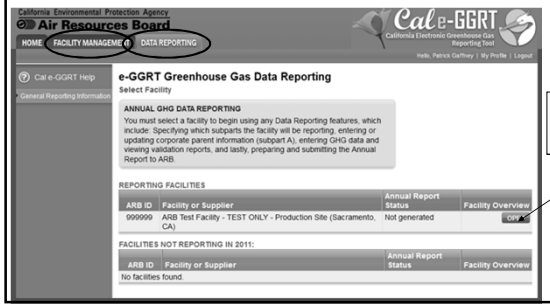
- Report all emissions from stationary fuel combustion sources under the subpart C module
- Exceptions to reporting under the subpart C module
  - Units exempted from reporting combustion emissions under 40 CFR 98.30(b)
  - Electricity generating units subject to subpart D
  - Combustion units that exhaust to a CEMS that monitors both combustion emissions and process emissions from another subpart (e.g. a cement kiln that has both process and combustion emissions measured by a CEMS will be reported under Subpart H)
  - Process units that have emissions calculated according to another subpart (this does not generally apply to all combustion located at a facility with process emissions)

When to Use Subpart D Module

- Electricity generating units that are subject to the requirements of the Acid Rain Program/Part 75
- Non-Part-75 electricity generating units report under subpart C

Reporting: Facility Profile and Data Reporting

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



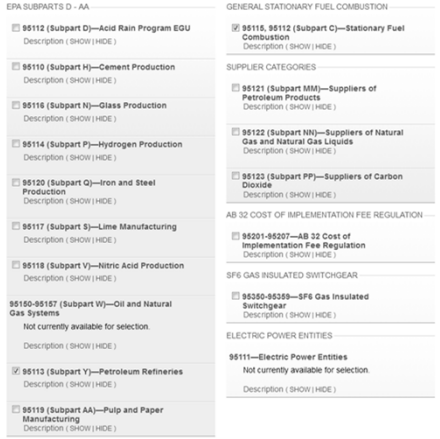
OPEN Facility Overview to begin entering data

Reporting: Adding Subparts

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

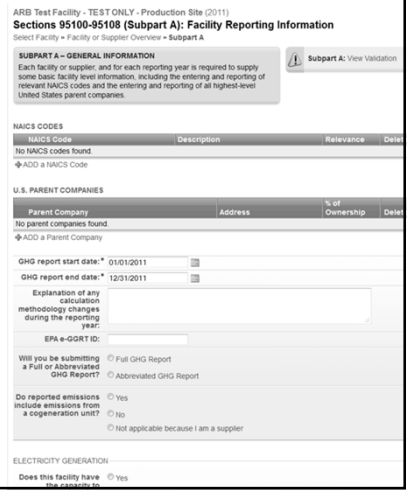
Reporting: Adding Subparts

- Select applicable subparts



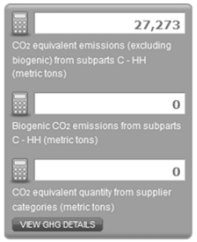
Subpart A

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



Emission Roll-ups

- Cal e-GGRT automatically calculates emissions totals for each subpart and aggregates the subpart totals into facility or supplier totals
- Annual emissions are calculated from each applicable subpart, for each of the following GHGs (in metric tons of each gas)
  - Biogenic CO_2
  - CO_2 (excluding biogenic CO_2)
  - CH_4
  - N_2O
  - Each fluorinated GHG
- The subpart totals are rolled-up into the following facility totals
  - Total CO_2 equivalent for all sources and all GHGs with the exception of biogenic CO_2
  - Biogenic CO_2 from all sources
- **Calculator DOES NOT calculate compliance obligation for cap and trade**



Emission Roll-ups

- If certain reporting elements are left blank, the roll-ups may not be performed correctly
- Cal e-GGRT does not double count emissions within each subpart
- Some required reporting fields are not used in the roll-up calculations, but you still need to enter information for these fields
- Roll-ups are calculated independently for each subpart

Some Useful Terminology

- Total CO_2 emissions
  - Measured or calculated value of CO_2 that includes both biogenic and non-biogenic emissions
- Biogenic CO_2 emissions
  - CO_2 emissions from biomass fuels
  - Biogenic portion of CO_2 from fuels with a fossil and biomass component (i.e. MSW and tires)
- Non-Biogenic CO_2 emissions
  - CO_2 emissions from fossil fuels
  - Sorbent CO_2
  - Process CO_2
  - Fossil fuel fraction of CO_2 from fuels with a fossil and biomass component (i.e. MSW and tires)
- Fossil fuel CO_2 emissions
  - CO_2 emissions from fossil fuels
  - Fossil fuel portion of CO_2 from fuels with a fossil and biomass component (i.e. MSW and tires)

Additional Data Reporting

- ARB requires additional data, not required by the U.S. EPA
- Report all data required within Cal e-GGRT, which is harmonized with the ARB regulation
  - Additional identification of biogenic emissions
  - Equation inputs, such as monthly HHV data or carbon content data
  - Additional information for electricity generation or cogeneration facilities

Subpart C Reporting

Adding a Subpart C Configuration

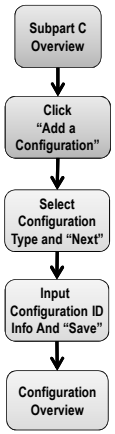
- Two Step Process

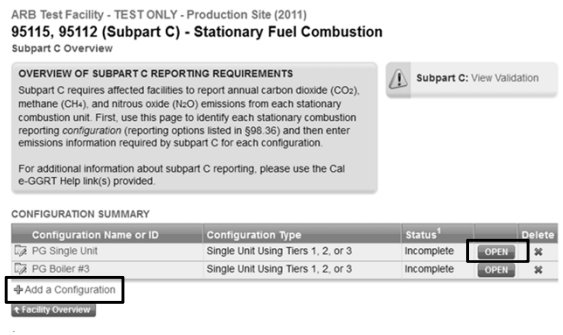
1. Configuration Setup
   - Reported once for each configuration
   - Varies by configuration type
2. Fuel Use and Emissions per Configuration
   - Reported for each fuel combusted in a given configuration
   - Varies by tier and fuel type

Subpart C Configurations

- Subpart C offers 6 different reporting options, known as **Configurations** in e-GGRT
- The different reporting options (configurations) are provided in 40 CFR 98.36(b) – (c)
  - Single Unit Using Tiers 1, 2, or 3 [98.36(b)]
  - Single Unit Using Tier 4 (CEMS) [98.36(b)]
  - Aggregation of Units [98.36(c)(1)]
  - Common Pipe [98.36(c)(2)]
  - Common Stack or Duct (CEMS) [98.36(c)(3)]
  - Alternative Part 75 Reporters [98.36(d)(2)]

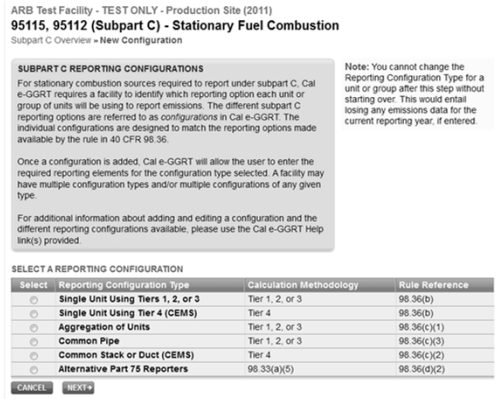
Reporting: Subpart C Stationary Combustion





Adding a Configuration

- Select appropriate configuration
- Complete descriptive information that follows

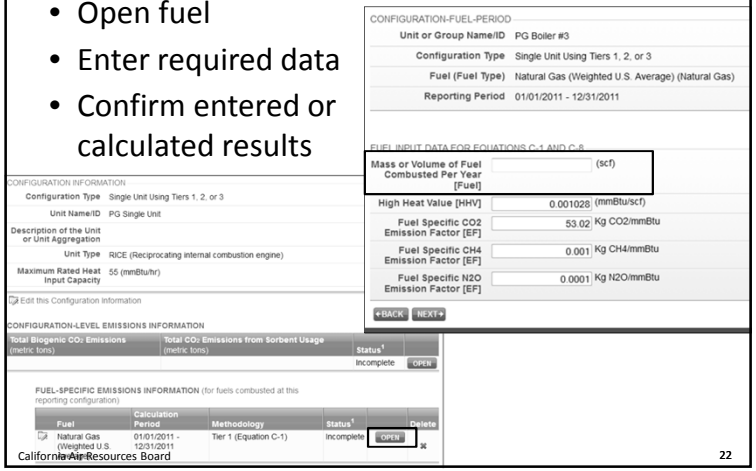


Entering Fuel and Emissions Data

- Open Unit Configuration
  - Click on "ADD a Fuel"
  - Select a fuel
  - Select a Tier
  - Add other fuels as applicable
- Open Fuel Information
  - Select calculation method
  - Enter fuel use data
  - Enter HHV and other data as applicable
  - See U.S EPA training slides for complete walk-through http://www.epa.gov/climatechange/emissions/training.html

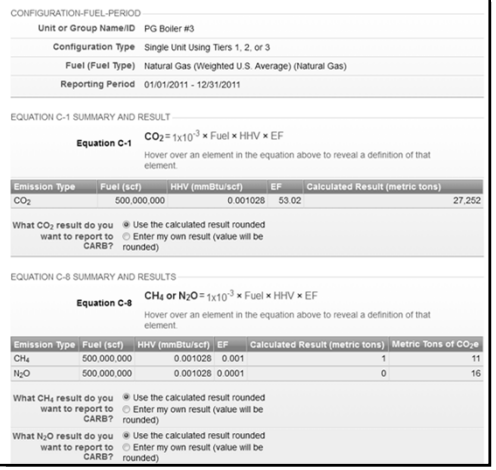
Entering Fuel Information

- Open fuel
- Enter required data
- Confirm entered or calculated results



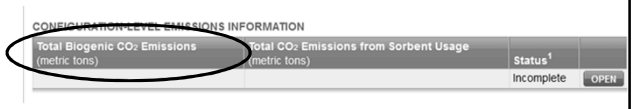
Check Results

- Results calculated by tool or user entered as applicable

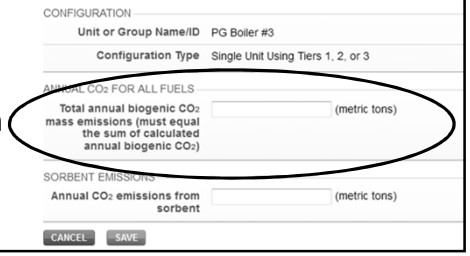


Biogenic Emissions

- ARB requires reporting of biogenic emissions totals

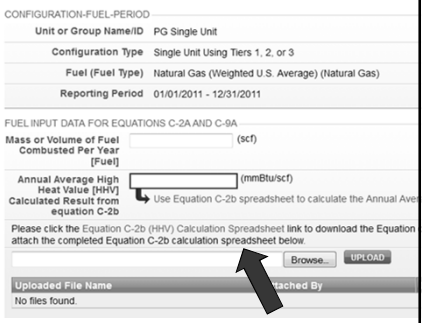


- Include all fuels for the configuration in total



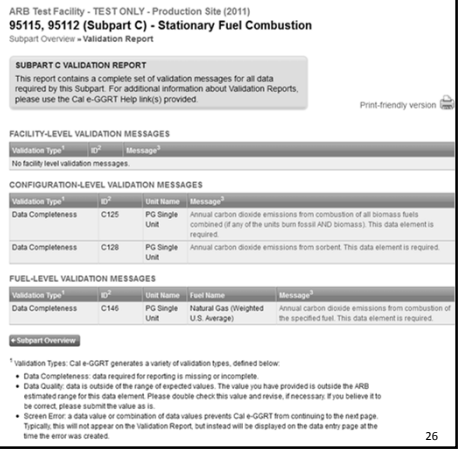
Uploading Required Supporting Data

- ARB requires reporting of specified additional data that may have been deferred for U.S. EPA reporting
- Complete and upload required spreadsheets provided in tool



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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Reporting Electricity Generating Unit

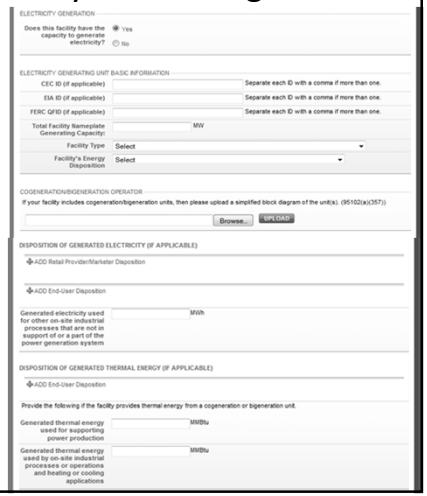
Electricity Generation Reporting

- Section 95112 includes reporting requirements for electricity/thermal generation information. It does not have a counterpart subpart in 40 CFR Part 98.
- Data fields for section 95112 can be found in Subparts A, C, and D.
  - Facility-level energy input-output and energy disposition → Subpart A
  - Unit-Level fuels, emissions, and basic information:
    - Non-Part-75 EGU → Subpart C
    - Part 75 EGU → Subpart D

Facility with Electricity Generating Units

Subpart A:

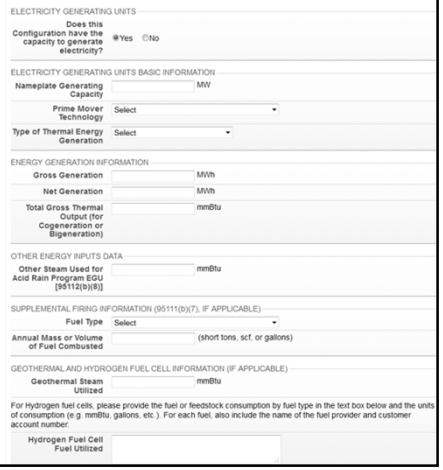
- General information about the electricity generating facility
- Upload a simplified block diagram (pdf preferred)
- Facility-level energy input-output
- Energy disposition



Electricity Generating Units

Subparts C & D:

- Additional data required for EGUs
- Only appears if selected
- Report only applicable fields
- See regulation for full requirements



Subpart D Units

- Overall functionality closely mirrors the reporting configurations in Subpart C
- Fuels and emissions data fields are mostly the same as in U.S. EPA's e-GGRT
- The only major difference is in how the CO_2 emissions number is entered. Users have to hand-typed the CO_2 number into Subpart D.
- Section 95112 data fields are identical to those in Subpart C

Key Reporting Dates

- See **Key Dates** webpage 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

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

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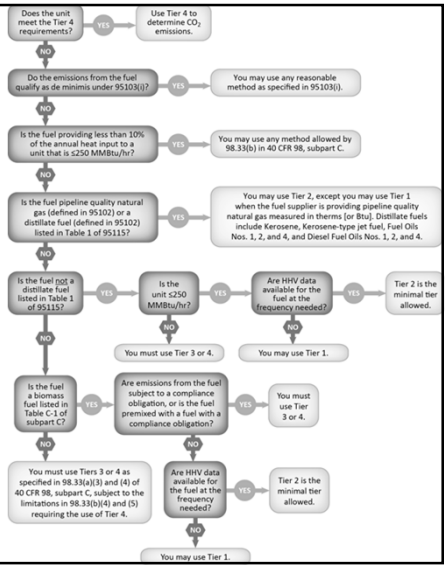
Reference

- Selecting a Subpart C Tier
- Facilities that qualify for abbreviated reporting under §95103(a) may use any method in 40 CFR 98.33(a) to calculated GHG emissions. For 2012 (and later) emissions reported in 2013 (and later), facilities must follow the tier selection shown here. For 2011 emissions data reported in 2012, reporters may use the methods allowed by 40 CFR 98, subpart C (see §95103(h)), and are not required to follow §95115(a) and (c).



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Acknowledgement

- Components of this slide presentation were taken or adapted from the U.S. EPA training program titled "e-GGRT Training Webinar on Reporting GHG Data for Subparts C&D" David Jacobson, U.S. EPA, GHGRP
- Full EPA slides are available here: http://www.epa.gov/climatechange/emissions/training.html

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