

Regulation for the Mandatory Reporting
of Greenhouse Gas Emissions

GHG Reporting Kickoff For 2015 Data

February 18, 2016

Presentation slides available here:

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

Outline

- ▣ Overview
- ▣ General Reporting and Verification Information
- ▣ Updates to Guidance Documents
- ▣ Cal e-GGRT Reporting Tool Updates
- ▣ Questions

Notes:

- ▣ This webinar focuses on facility and fuel supplier reporting
 - ▣ A separate webinar will be held for Electric Power Entities during April 2016
 - ▣ There are no changes to SF₆ reporting for 2015 data

2014 Data Reporting Recap

- ▣ 775 reports submitted
- ▣ 528 verified
 - ▣ 99% received positive or qualified positive emissions verification statements
 - ▣ Other reports not subject to verification (abbreviated or retail provider with no imports/exports)
- ▣ 2014 summary data posted for all reports
 - ▣ <http://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm>

Reporting Schedule

- ▣ April 11, 2016 (the 10th is a Sunday)
 - ▣ Reports due for facilities and suppliers
 - ▣ **No time extensions**
- ▣ June 1, 2016
 - ▣ Reports due for EPEs and electricity retail providers
 - ▣ Reports due for abbreviated reporters (suppliers do not qualify for abbreviated reporting)
- ▣ Failure to submit a report by the required deadline is a violation of the regulation for each day the report is late
- ▣ Key Dates Reference Page:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep-dates.htm>

Verification Schedule

- Must be completed by September 1, 2016
 - Verification statements due for all emissions and product data
 - Full verification this year – site visit required
 - **No time extensions**
- Begin verification process as soon as possible. Do not wait until reporting is completed.
- Verifiers must submit an adverse statement if verification not completed on time
- Failure to have a verification statement(s) submitted by the verification deadline is a violation of the regulation for each day the verification statement is late

Enforcement Summary

- ▣ Issues that could lead to enforcement
 - ▣ Incorrect data submitted
 - ▣ Errors leading to a material misstatement (includes errors present at the reporting or the verification deadline)
 - ▣ Failure to fix correctable errors
 - ▣ Late reports or failure to report
 - ▣ Late verification or no verification

- ▣ ARB has completed enforcement actions related to reporting, and continues enforcement activities

- ▣ As completed, case settlements are posted here:
<http://www.arb.ca.gov/enf/casesett/casesett.htm>

Regulation Updates

- Mandatory Reporting Regulation
 - No 2015 MRR updates
 - No new provisions take effect for 2015 data
- Cap-and-Trade Regulation
 - 2013 Revisions Take Effect for 2015+ Covered Emissions
 - Affects covered emissions calculations for oil and gas production (95852.2(b)(4)), lime produced during sugar production (95852.2(b)(13)), and combustion emissions from burning RBOB, distillate fuel oils, or natural gas liquids (95852(a)(2))
- WORKSHOP: Workshop on February 24 to discuss future MRR and Cap-and-Trade regulation changes
 - Board meeting scheduled for July 2016 on proposed amendments

Global Warming Potentials and Emission Factors

- Continue using the same global warming potentials (GWPs) and emission factors (EFs) that were used for 2011-2014 data
- ARB has not adopted the most recent U.S. EPA GWPs and EFs required for U.S. EPA reporting
- ARB regulation refers to 2009 and 2010 versions of U.S. EPA rule (§95100(c))
 - Available here:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm>

General Reporting and Verification Information

Cal e-GGRT Tool Availability



- Tool available NOW
 - 2015 data reporting activated
- Existing 2014 data configurations were migrated to 2015 reports
 - Reduces setup workload
- Electric Power Entity module will be activated in late March

Reporting Tips

- ▣ Start early, finish early
- ▣ Involve verifier as soon as possible
 - ▣ Include enough time to revise data based on verification
 - ▣ Some reporters are reaching the 6-year time limit with the same verification body and must hire a new verifier
 - ▣ Reminder: Complete and accurate data must be submitted by the reporting deadline
- ▣ Update DR, ADR, Agents as needed
 - ▣ Old employees, etc., have access to system until you remove them
- ▣ Contact ARB for any questions about requirements (ghgreport@arb.ca.gov)
 - ▣ Save and file any ARB responses as part of your GHG Monitoring Plan
- ▣ Check ARB guidance:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>

Some Recurring Reporting Issues

- ▣ Carefully check latitude/longitude coordinates in the Facility Profile (under Facility Management in Cal e-GGRT)
 - ▣ If not corrected, ARB will contact reporters
- ▣ If tool emissions calculations are overridden, confirm that entered Fuel x HHV x EF = Entered Emissions
 - ▣ We are seeing some units and conversion inconsistencies
- ▣ For cogeneration, validate that total thermal and electrical output is theoretically possible (it should not exceed the MMBtu of fuel inputs)
- ▣ For hydrogen producers, review guidance for descriptions of atomic hydrogen versus molecular hydrogen to ensure consistent reporting (atomic hydrogen includes molecular hydrogen)

Verification Tips for Reporters

- ▣ Correctable errors must be fixed
 - ▣ If not, verifier must submit adverse statement
- ▣ “Covered emissions” and “covered product data” must meet accuracy requirements and be reasonably assured of no material misstatement
- ▣ If verifier and reporter disagree on requirements, always contact ARB for assistance
- ▣ Ensure GHG monitoring plan meets the requirements of section 95105(c) and includes any additional helpful information for your verifier
 - ▣ Robust GHG monitoring plans facilitate verification
 - ▣ Include all ARB written clarifications regarding reporting in the GHG monitoring plan

Verification Process Timing (1)

- Earlier submission of Conflict of Interest (COI) self-evaluations needed
 - On average, 50% of COIs not submitted until June or later
 - Submit as soon as possible – COI can be submitted prior to report submission
- Schedule site visits early to address issues more quickly
 - On average, 50% of site visits not conducted until July or August
 - In 2014, 11% of site visits were not conducted until August
 - Conducting site visits in August should be avoided

	Total 2011-2014 Data Years (%)					
	March	April	May	June	July	Aug
COI Submittals	1%	16%	33%	25%	19%	6%
Site Visits	0%	4%	14%	32%	36%	14%

Verification Process Timing (2)

- ▣ Reporters can improve process by:
 - ▣ Ensuring contracting is in place and COI is submitted to ARB prior to report submission
 - ▣ Providing data to verifiers ASAP after report submission
 - ▣ Scheduling site visits in April and May for suppliers and facility operators, and June for EPEs
- ▣ Plan ahead to reduce unnecessary last minute regulation interpretations by ARB, and accuracy and metering questions
- ▣ Reporters and verifiers should work together to facilitate earlier submission of verification statements

Cessation of Reporting and Verification

- Reporting entities must notify ARB if they are no longer subject to reporting
 - Notify by March 31 of the year following shutdown or following the third consecutive year of emissions less than 10,000 MTCO₂e
 - See section 95101(h) of MRR for cessation requirements
- Reporting entities must notify ARB if they are no longer subject to verification
 - Notify by the applicable reporting deadline
 - Must meet requirements of 95101(i)
 - Verification always required if subject to Cap-and-Trade Regulation

Reporting of Natural Gas Received and Customer Deliveries (1)

- ARB must calculate covered emissions for natural gas suppliers
 - 2015 is first year of compliance obligation under Cap-and-Trade
 - Verified data received September 1, Cap-and-Trade Compliance deadline is November 1
 - Accurate reporting of natural gas purchases/acquisitions by facilities, and customer deliveries by suppliers, is extremely important to ARB's calculations of covered emissions
- Reporters must ensure that all required non-emissions data elements are reported correctly

Reporting of Natural Gas Received and Customer Deliveries (2)

- Reporters must ensure that the following information is correctly reported per MRR and ARB guidance:
 - Natural gas purchases/acquisitions reported by facilities per section 95115(k), including supplier name and customer account information
 - Ensure your reported natural gas supplier is the utility or pipeline that delivers to your facility (supplier). This is not always the company the gas is purchased from (marketer).
 - Customer delivery information reported by natural gas suppliers per section 95122(d)(2)(E)
 - Ensure all of a facility's individual customer accounts are summed and reported in the delivery information
 - Energy generation and disposition information per section 95112

Updates to Guidance Documents

Guidance Document Updates

- ▣ Some guidance documents expanded to provide clarifications
- ▣ Examples include:
 - ▣ Measurement accuracy and missing data (posted)
 - ▣ Biomass-derived fuels (posted)
 - ▣ Fuel supplier guidance (available late February)
 - ▣ Refineries and petroleum and natural gas systems (available late February)
 - ▣ Covered product data - clarifications for smaller industries (available late February)
- ▣ Documents available here:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>

Measurement Accuracy

- Revised Guidance Document

- FAQ's have been added to the guidance document on the following topics:
 - Meter postponement requests
 - Meter calibration or inspection failures
 - Alternative and temporary methods
- Reminder: when submitting meter postponement requests, include a detailed description of the proposed method to demonstrate accuracy for each meter included in the request
 - Incomplete postponement requests will not be processed until reporters submit required information

Fuel Suppliers

- Revised Guidance Document

- FAQ's being added to the guidance document on the following topics:
 - Ethanol and biodiesel reporting
 - Biofuel enterers (importers) as well as in-state biofuel producers only report the volume of fuel that is delivered outside the bulk system (i.e. outside the pipeline/terminal system)
 - Reporting scenarios for consignees of imported LPG related to imported, exported, and in-state purchased LPG
 - Intrastate pipeline reporting scenarios
 - Reporting applicability for intrastate pipeline operators
 - LDC covered emissions calculations – timelines and suggestions for expediting the process

Petroleum and Natural Gas Systems – Revised Guidance Document

- FAQ's being added to the guidance document on the following topics:
 - Reporting emissions from intermittent-bleed pneumatic devices
 - Clarifies emission factors and classification of low- vs. high-bleed
 - Reporting emissions from acid gas removal units with no vents, using a solid medium (Sulfatreat)
 - Clarifications regarding leaks methods
 - Reporting combustion emissions from small compressors (with no fuel meter)
- Please read and follow the guidance, as applicable, and contact ARB staff with questions

Cal e-GGRT Reporting Tool Updates

General Cal e-GGRT Updates

- Confidential data flag moved to Subpart A and validation to require text description of why claim was made
- Subpart A – Validation added to require descriptive information when reporting a greater than 5% change in emissions for facilities
- Added check-box in Subpart A to indicate if applying for Legacy Contract transition assistance under the Cap-and-Trade Program
- Transportation fuels, LPG, and natural gas liquid excluded from facility covered emissions now that they are covered upstream by fuel suppliers

General Updates – De Minimis

- For any CEMS reporting, de minimis reporting must now be performed within the CEMS configuration
 - Do Not use the de minimis workbook to report N₂O or CH₄ CEMS de minimis emissions
 - Designate emissions as de minimis within the fuel records
- This applies to Cement Production, Refineries, Hydrogen, and other CEMS users

EQUATION C-10 SUMMARY AND RESULTS

Equation C-10 $CH_4 \text{ or } N_2O = 0.001 \times (HI)_A \times EF$

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

Emission Type	(HI) _A (mmBtu)	EF	Calculated Result (metric tons)	Metric Tons of CO ₂ e
CH ₄	50,000	0.011	0.55	11.6
N ₂ O	50,000	0.0016	0.080	24.8

What CH₄ result do you want to report to CARB?
Use this checkbox to claim the CH₄ result being reported to CARB as de minimis.

Use the calculated result rounded
 Enter my own result (value will be rounded)
 Claimed as de minimis (do not report elsewhere)

What N₂O result do you want to report to CARB?
Use this checkbox to claim the N₂O result being reported to CARB as de minimis.

Use the calculated result rounded
 Enter my own result (value will be rounded)
 Claimed as de minimis (do not report elsewhere)

Fuel Suppliers

- ▣ Transportation Fuel Suppliers
 - ▣ Subpart MM workbook is now a “smart form.” Reporters no longer have to convert workbook to .xml file prior to upload
- ▣ Natural Gas Fractionators
 - ▣ Validation added to Subpart NN to ensure LPG product emissions are not greater than total emissions from all NGLs (LPG and non-LPG)

Products ^{1,3}	CO ₂ (metric tons)	CH ₄ (metric tons) ⁴	N ₂ O (metric tons) ⁴	HFC (metric tons) ⁴	PFC (metric tons) ⁴	Status ²
<input type="checkbox"/> Ethane (LPG and non-LPG)						Data Completeness NN402 LPG Propane cannot be greater than Propane (LPG and non-LPG).
<input type="checkbox"/> Propane (LPG and non-LPG)						
<input type="checkbox"/> Butane (LPG and non-LPG)						
<input type="checkbox"/> Isobutane (LPG and non-LPG)						
<input type="checkbox"/> Pentanes Plus (LPG and non-LPG)						
<input type="checkbox"/> LPG Ethane						
<input type="checkbox"/> LPG Ethylene						
<input checked="" type="checkbox"/> LPG Propane						Incomplete OPEN
<input type="checkbox"/> LPG Propylene						
<input type="checkbox"/> LPG Butane						
<input type="checkbox"/> LPG Butylene						
<input type="checkbox"/> LPG Isobutane						
<input type="checkbox"/> LPG Isobutylene						
<input type="checkbox"/> LPG Pentanes Plus						
Total	Incomplete	Incomplete	Incomplete	Incomplete	Incomplete	

Petroleum and Natural Gas Systems – De Minimis (1)

- For Petroleum and Natural Gas Systems, de minimis emissions are now directly reported in the petroleum and natural gas emissions workbook
- Do Not use the de minimis workbook to report Subpart W de minimis emissions
- Classification of de minimis emissions are now auto-assigned within Cal e-GGRT as covered or non-covered emissions for Subpart W
 - Reporters do not self-assign covered/non-covered emissions

Petroleum and Natural Gas Systems – De Minimis (2)

- De minimis can be aggregated into a single line, and not all fields need to have entries
 - It is acceptable to include all de minimis emissions in a single line for O&G production
 - De minimis emissions do not need to be subdivided to the field level

Does Entire Row Contain Standard or De Minimis Emissions? (any de minimis emissions must be reported in separate row(s)).	Contiguous Property/Sub-Facility Name:	Metered natural gas high bleed pneumatic device and pneumatic pump venting		
		CO ₂ Emissions (tCO ₂)	CH ₄ Emissions (tCH ₄)	Total CO ₂ e
	Total - Standard Emissions	805.0	7.0	952.0
	Total - De Minimis Emissions	125.0	2.6	179.6
Standard	Watson Shale 25	250.0	5.0	355.0
De Minimis	Watson Shale 25 - De Minimis	2.0	0.3	8.3
Standard	East Hill 23X	555.0	2.0	597.0
De Minimis	De Minimis Aggregation	123.0	2.3	171.3

Refineries and Hydrogen Production

- Minor CWB workbook updates
 - Combined Alkylation/Poly/Dimersol - C5+ Alkylate/Product
 - New field added to report CO₂e from refinery fuel gas combustion, excluding all pipeline quality natural gas for COI Fee Regulation

Cost of Implementation (COI) Fees Data: Refinery Fuel Gas [section 95104(f)(5) - COI Regulation]
Enter the CO₂e emissions for all refinery fuel gas combusted or consumed at the facility. Do not include emissions from pipeline quality natural gas combustion (see section 95204(f)(5) for removing the natural gas). The emissions entered in this field are not included in any facility total emissions and are only used for fees

Refinery Fuel Gas Combusted or Consumed On-Site (excluding natural gas)	Emissions (metric tons CO ₂ e)*
Refinery Fuel Gas Emissions	

*value NOT included in emissions totals for GHG report

- Capability added to report hydrogen feedstock characteristics in Subpart P if CEMS is used

Petroleum and Natural Gas Systems

- ▣ Changes for reporting de minimis (already discussed)
- ▣ Associated gas combustion reporting for COI Fee Regulation
 - ▣ New field added to Subpart W overview page
 - ▣ Must enter CO₂e from associated gas combustion, excluding all pipeline quality natural gas

4) COST OF IMPLEMENTATION FEES: ASSOCIATED GAS EMISSIONS

Enter the CO₂e emissions for all associated gas combustion at the facility. Include all combusted associated gas produced at the facility and combusted associated gas received from other facilities. Do not include combustion emissions from purchased pipeline quality natural gas received by an intrastate pipeline. The emissions entered in this field are not included in any facility total emissions and are only used for fees.

Emissions from Associated Gas Combusted On-Site:

Units:(metric tons CO₂e, NOT included in emissions totals)

Combustion Emissions – Petroleum and Natural Gas - Data Entry for 95153(y)(2)

- If 95153(y)(2) is required for oil and gas production, emissions are reported in Subpart C of the reporting tool
- In the Subpart C module, create a Single Unit or Aggregation of Units configuration
 - Name the unit with “(y)(2)” somewhere in the configuration name or unit description to facilitate verification and review
- Select the “Tier 1” Methodology in Cal e-GGRT and override the emissions results fields with the calculated results using Equations 35, 36 & 37

Resources

- Email reporting questions to: ghgreport@arb.ca.gov
- Reporting Guidance
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>
- Cal e-GGRT Tool Training
<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>
- Accredited Verification Bodies
<http://www.arb.ca.gov/cc/reporting/ghg-ver/ghg-ver-accreditation.htm>

Key Reporting Dates

Date	Activity
February 5	Public release of Cal e-GGRT
April 11	Regulatory deadline: Reporting deadline for facilities, except when subject to abbreviated reporting, and suppliers of fuels and carbon dioxide (date is 11 th because 10 th is a Sunday)
June 1	Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting
September 1	Regulatory deadline: Verification statements due (emissions data and product data)

GHG Reporting Contacts

Subject Matter	Contact
Manager – Climate Change Reporting Section	Brieanne Aguila , Manager 916.324.0919
General Reporting Requirements, Stationary Combustion, Electricity Generation and Cogen, Miscellaneous Sectors, Cal e-GGRT Reporting	Patrick Gaffney 916.322.7303
Reporting Tool Registration and General Questions	Karen Lutter 916.322.8620
Electricity Retail Providers and Electricity Marketers	Wade McCartney 916.327.0822
Fuel and CO ₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO ₂	Syd Partridge 916.445.4292
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