

California Environmental Protection Agency
Air Resources Board

Regulation for the
 Mandatory Reporting of Greenhouse Gas Emissions

GHG Reporting Kickoff for 2014 Data
 Regulation Changes, Product Data, Fees Data, Tool
 Changes, Others

March 11, 2015
 Presentation Slides Available Here:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance-training.htm>

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Outline

- Overview
- Regulation Updates
- Preparing for 2014 Data Reporting
- Cal e-GGRT Reporting Tool Updates
- Refinery and Hydrogen Product Data
- Other topics
- Questions

Note: This webinar focuses on facility and fuel supplier reporting.
 A separate webinar will be provided for Electric Power Entities in April 2015

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2013 Data Reporting Recap

- 750 reports submitted
- 519 verified
 - 100% received positive emissions verification statements (includes 12 qualified positive)
- Summary data posted for all reports
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm>

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Reporting Schedule

- April 10, 2015
 - Reports due for all entities except Electric Power Entities
 - No time extensions
- June 1, 2015
 - Reports due for EPEs and electricity retail providers
 - Reports due for abbreviated reporters
- Failure to submit a report by the required deadline is a violation of the regulation for each day the report remains unsubmitted
- Key Dates Reference Page:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep-dates.htm>

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Verification Schedule

- September 1, 2015
 - Final Verification Statements due for all emissions and product data
 - No time extensions
- Start early to ensure on-time completion and to correct any issues identified during verification
- Verifiers must submit 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 remains unsubmitted

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Enforcement Summary

- Issues that could lead to enforcement actions
 - Incorrect data submitted
 - Errors leading to a material misstatement
 - Failure to fix correctable errors
 - Late reports or failure to report
 - Late verification or no verification
- ARB has completed multiple 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>

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Updates to the Regulation for 2014 Data Reporting

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2014 Regulation Updates

- Revisions went into effect January 1, 2015
- Regulation available here: <http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm>
- All updates are effective for 2014 data reporting
 - Best available methods are only allowed for reporting primary refinery products and calcined coke (2014 data only, §95103(h))
- No plans for regulation updates in 2015

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Key Regulation Updates (1)

- Definition updates
- Must exclude inaccurate product data (§95103(l))
- Additional notifications and approvals for changes in methods (§95103(m)), including for covered product data
- New block diagram requirements for legacy contract reporters (§95112(i))
- Covered product data reporting updates
 - Dairy products, tomato processing, tissue products, wineries, etc.
 - Hydrogen plants
 - Refineries (primary refinery products, calcined coke)

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Key Regulation Updates (2)

- Integrate Cost of Implementation Fee Regulation data reporting requirements
 - No more “Fee” module in tool
- Transportation fuel suppliers – Added renewable diesel as reportable fuel, clarified biofuel and biomethane requirements
- Natural gas distribution – Requirement to report emissions from customer meters and dig-ins, and provide meter counts
- Verification – Natural gas purchase data and NAICS subject to verification

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Global Warming Potentials and Emission Factors

- Same global warming potentials (GWPs) and emission factors (EFs) as used for 2011-2013 data
- 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>
- ARB has not adopted the most recent U.S. EPA GWPs and EFs required for U.S. EPA reporting

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Reporting GHG Data

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Cal e-GGRT Tool Availability



- Tool available NOW
 - 2014 data reporting activated
- Existing 2013 data configurations were migrated to 2014 reports
 - Reduces setup workload
- Electric Power Entity module will be activated in early April

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Reporting Tips

- Start early, finish early
- Involve verifier as soon as possible
 - Include enough time to make verification revisions
- Update DR, ADR, Agents if needed
 - They 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>

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Verification Tips

- 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
- COI fee data is not subject to accuracy requirements in section 95103(k) or material misstatement assessment, but risk of misreporting will be reviewed
- If verifier and reporter disagree on requirements, always contact ARB for assistance
- Ensure all GHG Monitoring Plan elements, as required in section 95105(c), are described or referenced, and include all ARB written clarifications regarding reporting in the GHG Monitoring Plan

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Cal e-GGRT Data Entry Updated Elements

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Updated Workbooks (1)

- Must use updated workbooks, revised to reflect current reporting requirements
 - Available here:
<http://www.ccdsupport.com/confluence/display/calhelp/GHG+Reporting+Instructions>
- Hydrogen Production – P-1, P-2, P-3 workbooks
- Petroleum and Natural Gas Systems
 - Emissions Workbook (Note: combustion emissions using 95153(y)(2) are reported in Subpart C)
 - Activity Data Workbook
- Refinery – Production Data and Solomon Index
 - Primary Refinery Products reporting modified
 - Fuels for Cost of Implementation Fees
 - Calcined Coke

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Updated Workbooks (2)

- Refinery – Complexity Weighted Barrel
 - Cleanup to reflect current requirements
 - Updates to instructions for clarity
- Suppliers of Transportation Fuels
 - Updated to include Renewable Diesel
 - Includes fuel supplier data for COI Fees reporting
- SF₆ Reporting (for sulfur hexafluoride reporters only)
 - Updated for clarity and to reflect requirements
 - SF₆ data are not verified

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Updates for COI Fees Reporting Integration

- Updates to workbooks for Refinery Product Data and Transportation Fuel data for COI Fees fuels
- Added fuels to Subpart C & D
 - Natural Gas Produced and Consumed On-Site (not pipeline quality)
 - Natural Gas Produced and Consumed On-Site (pipeline quality)
 - Associated Gas Produced and Consumed On-Site
- Facilities must designate if natural gas received was directly from interstate pipeline
- Additional information collected for intrastate and interstate pipelines

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Updated General Product Data Reporting (§95115(n))

- Various updates for sectors
- Report general data in Subpart A
- Contact ARB staff for sector-specific questions
- Product data guidance
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm>

Example Product Data

Beer brewery (95115(n)(7))		
Snack food manufacturing facility (95115(n)(8))		
Sugar manufacturing facility (95115(n)(9))		
Tomato processing facility (95115(n)(10))		
Annual production of aseptic tomato paste (covered product data)		(short tons of 31% TSS)
Annual production of aseptic whole and diced tomato (covered product data)		(short tons)
Annual production of non-aseptic tomato paste and tomato puree (covered product data)		(short tons of 24% TSS)
Annual production of non-aseptic whole and diced tomato (covered product data)		(short tons)
Annual production of non-aseptic tomato juice (covered product data)		(short tons)
Pipe foundry (95115(n)(11))		
Aluminum billets producing facility (95115(n)(12))		
Rare earth mineral mining or processing facility (95115(n)(13))		
Fiberglass/chloride filter aids mining or processing facility (95115(n)(14))		

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Calculation Method Start Date

- Revision to tool behavior to retain Calculation Methodology Start Date
- Only revise Start Date if method is modified
- Tool automatically increments End Date year during migration

CONFIGURATION	
Unit or Group Name	GP-1 CARB Diesel Engines
Configuration Type	Aggregation of Units
EMISSIONS CALCULATION PERIOD	
Fuel (Fuel Type)	Distillate Fuel Oil No. 2 (Petroleum Products)
Calculation Methodology * Start Date	01/01/2013
<small>Enter the date for which this calculation methodology was first used to comply with Part 98. If this methodology was in use prior to January 1, 2010 select January 1, 2010 as the start date. If the facility switched to this methodology during 2010, enter the date on which the methodology change occurred.</small>	
Calculation Methodology * End Date	12/31/2014
<small>If no change in calculation methodology occurred during 2010, select December 31, 2010 as the end date. If a change in calculation methodology occurred, enter the date on which this methodology was last used.</small>	

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Transportation Fuel Suppliers

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Transportation Fuel Suppliers

- Minor clarifying revisions to section §95121:
 - Importers and in-state producers of biofuels must only report fuel that is delivered “outside the bulk transfer/terminal system”
 - Added renewable diesel as a reportable fuel beginning with 2014 data
 - Clarified that “pure” renewable diesel and biodiesel may contain up to 1% petroleum diesel
- Added non-emissions reporting requirements for COI Fee purposes for position holders and importers:
 - Report total *imported* CARBOB, California gasoline, California diesel
 - Report total quantity of biodiesel, renewable diesel blended with California diesel

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Transportation Fuel Suppliers

- Update to Subpart MM Workbook for COI Reporting

Non-emissions data required by Sections 95121(d)(7) and (8)	For AB 32 Cost of Implementation Fee purposes, all fuel suppliers, except for refiners that report pursuant to section 95113(m), must report the following data pursuant to section 95121(d)(7) and (8)	
	(Quantity) Volume of fuel imported from outside of California (barrels).	(Percentage) For CARBOB, the designated percentage of oxygenate must be reported
Imported Fuels		
CARBOB*		
California Gasoline**		
California diesel fuel***		
Biodiesel		
Renewable Diesel		
Blended Biomass Diesel Fuels	(Quantity) Volume of fuel blended with California diesel for use in California (barrels).	
Biodiesel		
Renewable Diesel		

* As defined by "California gasoline blendstock for oxygenate blending" in section 95202 of the AB 32 Cost of Implementation Fee Regulation
 ** As defined by "California gasoline" in section 95202 of the AB 32 Cost of Implementation Fee Regulation
 *** As defined by "California diesel" in section 95202 of the AB 32 Cost of Implementation Fee Regulation

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Suppliers of NG, NGLs, LPG, CNG, and LNG (§95122)

- Minor clarifying revisions to §95122:
 - Clarified that for LPG products, NGL fractionators must only report the LPG products that were produced on-site at the fractionation facility and sold or delivered to others
 - Except LPG products for which a final destination outside CA can be demonstrated
 - Minor clarifications to ensure consistent reporting of “biomethane” emissions by Local Distribution Companies (LDCs)
- Added non-emissions reporting requirements for COI Fee purposes for Local Distribution Companies
 - Report sum of deliveries (in MMBtu) by the following categories: residential, commercial, industrial, electricity generation, and “other”
 - Report total MMBtu delivered to all end-users

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Refineries, Hydrogen Production, & Petroleum and Natural Gas Systems

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Petroleum Refineries (1)

- Best available methods allowed for primary refinery products and calcined coke (§95103(h)) for 2014 data only
- Complexity Weighted Barrel (CWB) calculation methodology modified (§95113(l)(5))
- Reporting Primary Refinery Products – §95113(l) must report onsite production of refinery products, not sales
- Primary refinery products or blending stock produced elsewhere and used only for blending into a primary refinery product shall not be included in primary refinery product reported to ARB

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Petroleum Refineries (2)

- Finished products and COI products are not covered product data
- Cost of Implementation Fee Data (§95113(m))
 - Was previously reported in “Fees” module, now reported in Cal e-GGRT Production Data Workbook
 - Report CARBOB, Finished California Gasoline, California Diesel, biodiesel, and renewable diesel distributed for use in California

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Hydrogen Production

- Composition of all feedstocks – for gaseous, liquid, and solid feedstocks, report both atomic and molecular hydrogen content as well as carbon content (§95114(e))
- Hydrogen sold or transferred – report both the quantity and receiver for all hydrogen sold or transferred (§95114(j))

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Petroleum and Natural Gas Systems (1)

- All reporters (except off-shore production)
 - Continue to report data by “sub-facility” (§95156 and §95102(a))
 - Flare emissions – equations modified to simplify calculation, (§95153(l)(5))
 - Centrifugal compressor emissions – report *spin-up* gas related emissions whether combusted as a fuel, flared, or vented, (§95153(m)(1)(A))
 - Report sorbent CO₂ emissions from fluidized bed boilers w/ flue gas desulfurization, (§95153(y)(5))

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Petroleum and Natural Gas Systems (2)

- On-Shore Petroleum and NG Production, NG Processing
 - Report heat energy (MMBtu) of associated gas (production from both thermal EOR and other-than-thermal EOR) using production meters or sales records, or GOR and GWR data (§95156(a)(9) and (10))
 - Report amount of re-injected NGLs into crude as crude oil covered product data pursuant to 95156(a)(7) or (8), not as NGLs (§95156(c)(12))
 - All other NGLs produced at the facility should be reported pursuant to 95156(c)
 - Report heat energy of dry gas produced (MMBtu) annually using average HHV (§95156(b))
- On-shore Petroleum and NG Production
 - New voluntarily reporting of renewably produced thermal energy input (MMBtu) to EOR operations, (95157(c)(19)(l))

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Combustion Emissions Data Entry for 95153(y)(2)

- If 95153(y)(2) is required, emissions are reported in Subpart C of the reporting tool
- Modified reporting method to accommodate (y)(2) data
- In the Subpart C module, create a Single Unit or Aggregation of Units configuration
- See 2013 training slides for complete walkthrough of 95153(y)(2) approach

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Combustion Emissions New Fuel Added for 95153(y)(2)

- If "Associated Gas" select fuel from system
 - Added for 2014+ reporting
 - Use Associated Gas whenever possible, for consistent reporting
- If "Other" fuel added, must be "Blend (Gas)" type or only Tier 3 method available
 - Use only if no pre-defined fuel available

OTHER FUELS - GASEOUS HIDE

- Blast Furnace Gas
- Coke Oven Gas
- Propane Gas
- Refinery Fuel Gas
- Associated Gas Produced and Consumed On-Site

↓ If a fuel is not found among those listed, you can add it to the other fuels and blends list below.

OTHER FUELS AND BLENDS HIDE

- PSA Reject Gas - Other (gas)
- Field Gas from Oil Production Sub W

ADD AN Other Fuel or Blend

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Petroleum and Natural Gas Systems

- Emissions Workbook Updates (examples)
- Expanded to separate crude & condensate

Crude Oil, Condensate, and Produced Water Dissolved CO ₂ and CH ₄									
Crude Oil CO ₂ Emissions (tCO ₂)	Crude Oil CH ₄ Emissions (tCH ₄)	Crude Oil Total CO ₂ e	Condensate CO ₂ Emissions (tCO ₂)	Condensate CH ₄ Emissions (tCH ₄)	Condensate Total CO ₂ e	Produced Water CO ₂ Emissions (tCO ₂)	Produced Water CH ₄ Emissions (tCH ₄)	Produced Water Total CO ₂ e	Volume Produced Water (bbl)
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

- Customer Meter and Dig-In Emissions for Natural Gas Distribution

Emissions from customer meters	0.0
Emissions from pipeline dig-ins	0.0

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Natural Gas Distribution

- Pipeline Dig-Ins
 - Report CH₄ and CO₂ emissions (§95152(i)(11))
 - Estimate using measured data or engineering estimates (§95153(w))
 - Report number of dig-ins (§95157(c)(16)(X))
- Customer Meters
 - Report CH₄ and CO₂ emissions (§95152(i)(10))
 - Estimate using methods in §95153(p)(6), using counts and EFs
 - Report number of meters by Residential, Commercial, and Industrial meters (§95157(c)(16)(W))

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Resources

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Resource Web Sites

- 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>

Key Reporting Dates

Date	Activity
February 2	Regulatory deadline: Due date for electric power entities to register specified facilities outside California
February 18	Public release of Cal e-GGRT
April 10	Regulatory deadline: Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting
June 1	Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting
July 15	Regulatory deadline: Deadline for corrections to RPS Adjustment data required for electric power entity data reports
September 1	Regulatory deadline: Final 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, Miscellaneous Sectors (cement, glass, pulp and paper, etc.), Cal e-GGRT Reporting	Patrick Gaffney 916.322.7303
Reporting Tool Registration and General Questions	Karen Lutter 916.322.8620
Electricity Generation and Cogeneration Facilities	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	Svd Partridge 916.445.4292
Petroleum Refineries, Hydrogen Plants, Oil & Gas Production, and Associated Product Data	Byard Mosher 916.323.1185
Manager – Greenhouse Gas Report Verification	Renee Lawver , Manager 916.322.7062
Chief – Program Planning and Monitoring Branch	Jim Aguila , Chief 916.322.8283

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