

California Environmental Protection Agency
Air Resources Board

California Regulation for the
 Mandatory Reporting of Greenhouse Gas Emissions

**2012 GHG Reporting for
 Fuel Suppliers**
 Applicability and Reporting Guidance
 (Sections 95121 and 95122)

February 21, 2013
 Presentation Slides Available Here:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

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Outline

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 - Applicability
 - Reporting Issues
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- Q&A

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Introduction

§95101(c):

- Contains rule applicability requirements for suppliers of transportation fuels, natural gas, NGLs, and LPG

§95121:

- Contains reporting requirements for transportation fuel suppliers including refineries producing LPG
- References 40 CFR Part 98, Subpart MM

§95122:

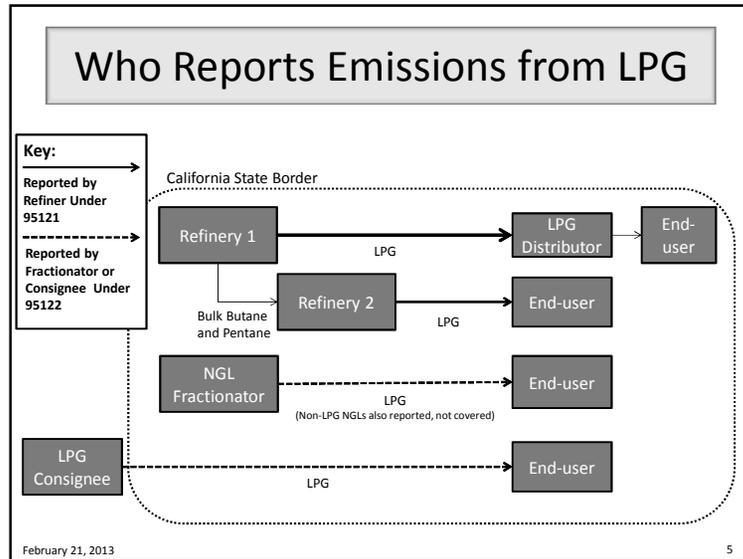
- Contains reporting requirements for suppliers of natural gas and NGL fractionators that supply NGLs and/or LPG
- References 40 CFR Part 98, Subpart NN

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2012 MRR Revisions

- §95101(c) – added CNG/LNG consignees - Effective for 2013 data reported in 2014
- §95121 (no substantive changes)
 - Clarified language, incorporated fuel table to improve readability, added definition for ‘Refiners’
- §95122
 - Clarified language to improve readability
 - Added reporting requirements for CNG/LNG consignees (importers) - Effective for 2013 data reported in 2014
- For a complete list of MRR Revisions and Applicability for 2012 data, refer to guidance:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance-docs.htm>

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Suppliers of Transportation Fuels (Section 95121)

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- ### Definitions
- **Position Holder: §95102(a)(344)**
– An entity that holds an inventory position in transportation fuel at a CA fuel terminal
 - **Refiner (new definition): §95102(a)(394)**
– An entity that delivers transportation fuel to end-users in CA that were produced at an entity or entity-subsidiary owned refinery
 - **Enterer: §95102(a)(152)**
– An entity that imports transportation fuel and is the importer of record under federal customs law or the owner of the fuel upon entry into CA.
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- ### Fuel Suppliers are:
- Position holders delivering fuel across terminal racks
 - Refiners delivering fuel across racks at refineries and pipeline terminals as the position holder
 - Enterers (importers) importing fuel outside the bulk transfer/terminal system
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Applicability

- Produce, import and/or deliver an annual quantity of transportation fuel that, if completely oxidized, would result in the release of greater than or equal to 10,000 MT CO₂e in California
- All refiners that produce liquefied petroleum gas (LPG) must report regardless of who holds the last inventory position or quantity

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Transportation Fuels

Fuel	
CBOB—Summer	Distillate Fuel Oils
Regular	Distillate No. 1
Midgrade	Distillate No. 2
Premium	Liquefied Petroleum Gas (LPG)
CBOB—Winter	Ethane
Regular	Ethylene
Midgrade	Propane
Premium	Propylene
RBOB—Summer	Butane
Regular	Butylene
Midgrade	Isobutane
Premium	Isobutylene
RBOB—Winter	Pentanes Plus
Regular	Biomass-Derived Fuel
Midgrade	Ethanol (100%)
Premium	Biodiesel (100%, methyl ester)
	Rendered Animal Fat

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Gasoline Blendstocks

- Gasoline Blendstocks
 - RBOB is equivalent to CARBOB
 - CBOB is generally not legal for use as a vehicle fuel in California, so CBOB emissions should be zero for California fuel suppliers
 - Ethanol (biomass derived fuel): typically mixed with RBOB at the fuel terminal to produce E10 motor gasoline (10% ethanol, 90% RBOB)
- All blendstocks must be reported separately
 - Example: 100 barrels (bbls) of E10 would be reported as 90 bbl RBOB, 10 bbl ethanol

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Diesel and Biodiesel

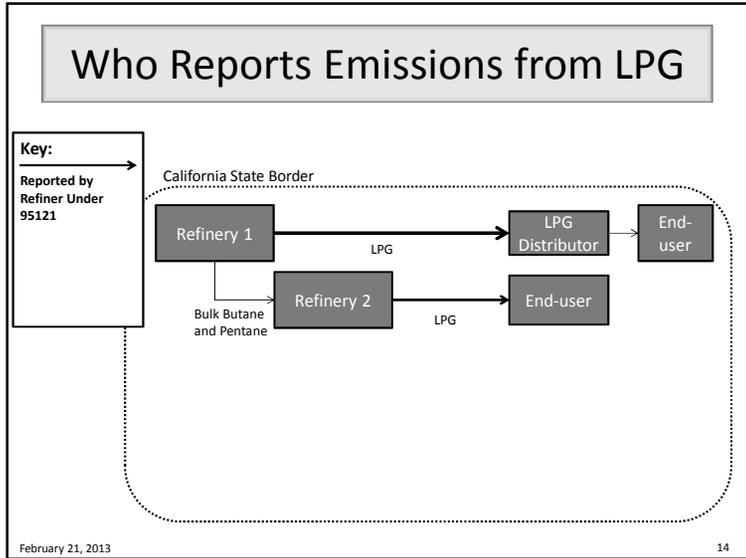
- Diesel Fuel
 - Only fuel that meets the definition of diesel (distillate) # 1 or # 2 is reported
 - Includes both dyed and undyed
- Biodiesel (biomass-derived fuel)
 - Biodiesel is produced for distribution as pure biodiesel (B100) or biodiesel blends such as B20 (20% biodiesel, 80% fossil derived diesel).
 - All biodiesel, whether blended or unblended, must be reported by the position holder or producer delivering the fuel across the rack.

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Liquefied Petroleum Gas

- Refiners must report LPG produced and delivered in California as described in §95121
- Refiners should only report LPG components that are produced and sold or delivered in mixtures that could be used as a fuel by an end-user.
 - Bulk Butanes/Pentanes etc. sold to other refineries for use as feedstock do not fit the definition of LPG and are not reported

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Emissions Reporting Guidance

- Position Holders:** Must report all transportation fuels that are delivered across the rack at California terminals
 - Fuels that change ownership upstream of a terminal rack (e.g. pre-terminal or inter-terminal transactions) are reported by the position holder that has ownership of the fuel as it is delivered across the rack.
- Enterers:** *Only* required to report fuels imported outside of the bulk transfer/terminal system.
 - All imported fuel delivered to a California fuel terminal is reported by the position holder, not the enterer (unless they are the same entity)

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Emissions Reporting Guidance

- Refiners:** Report all fuel distributed across a CA terminal rack, plus fuel delivered via bulk transfer to any unlicensed entities (i.e. not a BOE licensed fuel supplier)
- Two approaches to reporting:**
 - Refiner* parent company reports fuel delivered from all terminals, including terminals on-site at company or subsidiary owned refineries
 - Refineries* include fuel delivered from on-site terminals under their GHG report, and the Refiner parent company reports fuel delivered from all other terminals where positions are held

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Bulk Transfer to Other Fuel Suppliers

- Refiners commonly trade (buy/sell) transportation fuel products in bulk with other fuel suppliers
- Refiners do not report fuel delivered in bulk via pipeline to other fuel suppliers
 - The refiner must confirm that the purchaser is a licensed fuel supplier with the California Board of Equalization (BOE).
 - If this cannot be confirmed, the refiner must report the fuel delivered in bulk to the unlicensed entity
 - Contact ARB staff for assistance determining BOE status if it is unclear

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Fuel Supplier Data vs. Refinery Product Data

- Fuel volumes reported under §95121 are used to calculate emissions from combustion of fuel by California end-users
- Refinery product volumes (including transportation fuels) are reported under §95113 and used for allowance allocation
- Product data is not equivalent to fuel volume data reported under §95121.

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Data Monitoring and Meter Accuracy

- Required to have GHG Monitoring Plan, as described in §95105(c)
 - Suppliers must meet 40 CFR §98.3(g)(5) requirements, not subject to §95105(c)(1)-(10)
- Most meters used by fuel suppliers are financial transaction meters that likely meet calibration exemption criteria in §95103(k)(7) and §95121(c)(1)
- Reporter must demonstrate that meters meet exemption criteria during verification
- Non-exempt meters must meet all calibration and accuracy requirements in § 95103(k)

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Verification

- Fuel suppliers are required to obtain verification services if reporting > 25,000 MT CO₂e
 - Verification team is required to have at least one “transactions sector” specialist
 - A list of verification bodies and qualified verifiers is available here: http://www.arb.ca.gov/cc/reporting/ghg-ver/arb_vb.htm.

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Questions?

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Suppliers of Natural Gas, Natural Gas Liquids, and Liquefied Petroleum Gas (Section 95122)

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Applicability

- Natural gas suppliers that produce, import or deliver an annual quantity of gas/LPG that, if completely combusted, would result in $\geq 10,000$ MT CO₂e, including:
 - Gas utilities: Public Utility Gas Corporations (PUGCs) and Publicly Owned Gas Utilities (POGUs)
 - Operators of intrastate pipelines
 - Operators of interstate pipelines
 - Consignees of LPG
- Natural gas liquid (NGL) fractionators, regardless of quantity

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Emissions Reporting – NG Suppliers

- Gas Utilities (PUGCs and POGUs) must report emissions from:
 - Gas received at city gate (or state border), **minus**
 - Net gas re-delivered to other gas utilities or pipelines, **minus**
 - Net gas put on storage
 - Gas received from local production or taken out of storage will be *added* to the reported volume
 - Also must report volume and customer data for natural gas delivered to each end-user registering supply equal to or greater than 460,000 Mscf (~25,000 MT CO₂e)
 - This information is used by ARB to calculate each NG suppliers 'covered emissions'

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Emissions Reporting – NG Suppliers

- **Intrastate** Pipelines must report emissions from:
 - The total amount of gas delivered to all entities (local utilities, other pipelines, or end-users)
 - Similar to other gas suppliers, must report volume and customer data for natural gas delivered to each end-user registering supply equal to or greater than 460,000 Mscf (~25,000 MT CO₂e).
- **Interstate** Pipelines must report only :
 - Gas volume and customer data as specified in section 95122(d)(3)
 - No emissions data is reported, therefore verification is not required for interstate pipelines
 - Data is similar to what is required to be reported under the Fee Reg, however interstate pipelines are nonetheless required to report under 95122 if the pipeline delivers into California a quantity of gas exceeding the reporting threshold.

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NG Supplier Covered Emissions Calculation

- Covered emissions for a NG supplier are equal to:
 - Total emissions from all fuel delivered to end users as calculated as specified in §95122, **minus**
 - The sum of fuel that is delivered to other covered facilities in California.
- The covered emission calculation is performed by ARB staff
 - See §95852(c) of the Cap and Trade regulation for more information on the compliance obligation calculation

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Emissions Reporting – NGL Fractionators

- NGL fractionators report the following NGL products and LPG products produced and supplied.

Natural Gas Liquids	LPG Components
Ethane	LPG – Ethane
Propane	LPG – Ethylene
Butane	LPG – Propane
Isobutane	LPG – Propylene
Pentanes Plus	LPG – Butane
Liquefied Petroleum Gas (reported by component)	LPG – Butylene
	LPG – Isobutane
	LPG – Isobutylene
	LPG – Pentanes Plus

- If the product leaving the facility meets the definition of LPG, it is reported by individual component.

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NGL or LPG?

- LPG is defined as a mix of NGL components, primarily propane and butane, that is distributed for use as a fuel (see §95102(a)(266)).
 - Includes products sold as LPG (grades HD-5 and HD-10), as well as other component mixtures meeting the definition
- Only emissions from LPG components count as covered emissions.

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Examples of NGL/LPG Reporting

- Example: Fractionator produces and delivers the following:
 - 1,000 bbl of bulk ethane → **reported as NGL (ethane)**
 - 5,000 bbl of natural gasoline → **reported as NGL (pentanes plus)**
 - 100,000 bbl of HD-5 LPG (96% propane, 4% propylene) → **reported as 96,000 bbl of LPG – propane, and 4,000 bbl of LPG - propylene**
 - 10,000 bbl of fuel mix (50% propane, 40% butane, 10% isobutene) → **reported as 5,000 bbl of LPG – propane, 4,000 bbl of LPG - butane, and 1,000bbl of LPG – isobutene)**

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NGL Fractionator Product Data Reporting

- All NGL fractionators are also required to report NGL product data under section 95156(d) of the MRR (subpart W of the Cal-eGGRT reporting tool).
- All NGL and LPG products are considered 'covered product data.'
- Product data is likely to be largely consistent with the data reported under section 95122

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Emissions Reporting – LPG Consignees

- A California consignee is an entity that receives imported LPG
- California consignees must report:
 - LPG volumes by individual LPG component if the composition is provided by the producer.
 - 'LPG' using default the emissions factor if the LPG composition is not provided.

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Questions?

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Additional Training

- ARB sector-specific training (see link for times) <http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>
 - February 14th - Electricity Generation and Cogeneration
 - February 20th - Petroleum and Natural Gas Systems
 - **February 21st - Fuel Suppliers – Transportation, NG, etc.**
 - **February 28th - Refinery Product Data**
 - **March 26th - Electric Power Entities**
- Contact ARB staff as needed for questions

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Key Reporting Dates

Date	Activity
February 1	Regulatory deadline: Due date for electric power entities to register specified facilities outside California
February 13	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 3	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 3	Regulatory deadline: Final verification statements due (emissions data and product data)

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Resources

- **Reporting Guidance: Applicability, Metering, Fuel Supplier Reporting**
<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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GHG Reporting Contacts

Subject Matter	Contact
GHG Mandatory Reporting (General)	<u>Dave Edwards</u> , Manager 916.323.4887
Reporting Requirements, Stationary Combustion, Other Sectors (cement, glass, pulp and paper, etc.)	<u>Patrick Gaffney</u> 916.322.7303
Reporting Tool Registration and General Questions	<u>Karen Lutter</u> 916.322.8620
Electricity Generation and Cogeneration Facilities	<u>Anny Huang</u> 916.323.8475
Electricity Retail Providers and Electricity Marketers	<u>Wade McCartney</u> 916.327.0822
Fuel and CO ₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO ₂	<u>Syd Partridge</u> 916.445.4292
Petroleum Refineries, Hydrogen Plants, Oil & Gas Production	<u>Byard Mosher</u> 916.323.1185
Product Data – Refineries, and Oil & Gas	<u>Joelle Howe</u> 916.322.6349
Greenhouse Gas Report Verification	<u>Renee Lawver</u> , Manager 916.322.7062
Chief – Greenhouse Gas Emission Inventory Branch	<u>Richard Bode</u> , Chief 916.323-8413

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