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

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
**Who Reports Emissions from LPG**

**Key:**
- Reported by Refiner Under 95121
- Reported by Fractionator or Consignee Under 95122

- **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.

**Definitions**

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**Suppliers of Transportation Fuels (Section 95121)**

**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
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

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

Transportation Fuels

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Summer</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOB</td>
<td>Distillate Fuel Oils</td>
<td>Distillate Fuel Oils</td>
</tr>
<tr>
<td>Regular</td>
<td>Distillate No. 1</td>
<td>Distillate No. 1</td>
</tr>
<tr>
<td>Midgrade</td>
<td>Distillate No. 2</td>
<td>Distillate No. 2</td>
</tr>
<tr>
<td>Premium</td>
<td>Liquefied Petroleum Gas (LPG)</td>
<td>Liquefied Petroleum Gas (LPG)</td>
</tr>
<tr>
<td>CBOB</td>
<td>Ethane</td>
<td>Ethane</td>
</tr>
<tr>
<td>Regular</td>
<td>Ethylene</td>
<td>Ethylene</td>
</tr>
<tr>
<td>Midgrade</td>
<td>Propane</td>
<td>Propane</td>
</tr>
<tr>
<td>Premium</td>
<td>Propylene</td>
<td>Propylene</td>
</tr>
<tr>
<td>RBOB</td>
<td>Butane</td>
<td>Butane</td>
</tr>
<tr>
<td>Regular</td>
<td>Butylene</td>
<td>Butylene</td>
</tr>
<tr>
<td>Midgrade</td>
<td>Isobutane</td>
<td>Isobutane</td>
</tr>
<tr>
<td>Premium</td>
<td>Isobutylene</td>
<td>Isobutylene</td>
</tr>
<tr>
<td>RBOB</td>
<td>Pentanes Plus</td>
<td>Pentanes Plus</td>
</tr>
<tr>
<td>Regular</td>
<td>Biomass-Derived Fuel</td>
<td>Biomass-Derived Fuel</td>
</tr>
<tr>
<td>Midgrade</td>
<td>Ethanol (100%)</td>
<td>Ethanol (100%)</td>
</tr>
<tr>
<td>Premium</td>
<td>Biodiesel (100%, methyl ester)</td>
<td>Biodiesel (100%, methyl ester)</td>
</tr>
</tbody>
</table>

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.
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.

WhoReports Emissions from LPG

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).

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:
  1) Refiner parent company reports fuel delivered from all terminals, including terminals on-site at company or subsidiary owned refineries.
  2) 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.
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

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.

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)

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.
Questions?

Applicability

- Natural gas suppliers that produce, import or deliver an annual quantity of gas/LPG that, if completely combusted, would result in ≥10,000 MT CO$_2$e, 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

Emissions Reporting – NG Suppliers

- Gas Utilities (PUGCs and POGUs) must report emissions from:
  - Gas received at city gate (or state border), \textbf{minus}
  - Net gas re-delivered to other gas utilities or pipelines, \textbf{minus}
  - Net gas put on storage
    - Gas received from local production or taken out of storage will be \textit{added} to the reported volume
    - Also \textbf{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 CO$_2$e)
    - This information is used by ARB to calculate each NG suppliers 'covered emissions'
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.

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

Emissions Reporting – NGL Fractionators

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

<table>
<thead>
<tr>
<th>Natural Gas Liquids</th>
<th>LPG Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethane</td>
<td>LPG – Ethylene</td>
</tr>
<tr>
<td>Propane</td>
<td>LPG – Ethylene</td>
</tr>
<tr>
<td>Butane</td>
<td>LPG – Propane</td>
</tr>
<tr>
<td>Isobutane</td>
<td>LPG – Propane</td>
</tr>
<tr>
<td>Pentanes Plus</td>
<td>LPG – Butane</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas (reported by component)</td>
<td>LPG – Butylene</td>
</tr>
<tr>
<td></td>
<td>LPG – Isobutane</td>
</tr>
<tr>
<td></td>
<td>LPG – Pentanes Plus</td>
</tr>
</tbody>
</table>

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

• 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.
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 1,000 bbl of LPG – isobutene

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.

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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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

Key Reporting Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>Regulatory deadline: Due date for electric power entities to register specified facilities outside California</td>
</tr>
<tr>
<td>February 13</td>
<td>Public release of Cal e-GGRT</td>
</tr>
<tr>
<td>April 10</td>
<td>Regulatory deadline: Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting</td>
</tr>
<tr>
<td>June 3</td>
<td>Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting</td>
</tr>
<tr>
<td>July 15</td>
<td>Regulatory deadline: Deadline for corrections to RPS Adjustment data required for electric power entity data reports</td>
</tr>
<tr>
<td>September 3</td>
<td>Regulatory deadline: Final verification statements due (emissions data and product data)</td>
</tr>
</tbody>
</table>
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)

GHG Reporting Contacts

<table>
<thead>
<tr>
<th>Subject Matter</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG Mandatory Reporting (General)</td>
<td>Dave Edwards, Manager 916.323.4887</td>
</tr>
<tr>
<td>Reporting Requirements, Stationary Combustion, Other Sectors (cement, glass, pulp and paper, etc.)</td>
<td>Patrick Gaffney 916.322.7503</td>
</tr>
<tr>
<td>Reporting Tool Registration and General Questions</td>
<td>Karen Lutter 916.322.8620</td>
</tr>
<tr>
<td>Electricity Generation and Cogeneration Facilities</td>
<td>Anny Huang 916.323.8475</td>
</tr>
<tr>
<td>Electricity Retail Providers and Electricity Marketers</td>
<td>Wade McCartney 916.322.8620</td>
</tr>
<tr>
<td>Fuel and CO₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO₂</td>
<td>Syd Partridge 916.445.4292</td>
</tr>
<tr>
<td>Petroleum Refineries, Hydrogen Plants, Oil &amp; Gas Production</td>
<td>Byard Mosher 916.322.1385</td>
</tr>
<tr>
<td>Product Data – Refineries, and Oil &amp; Gas</td>
<td>Joelle Howe 916.322.7062</td>
</tr>
<tr>
<td>Greenhouse Gas Report Verification</td>
<td>Renee Lawver, Manager 916.322.7062</td>
</tr>
<tr>
<td>Chief – Greenhouse Gas Emission Inventory Branch</td>
<td>Richard Bode, Chief 916.323.8413</td>
</tr>
</tbody>
</table>