

Greenhouse Gas Reporting Guidance for Suppliers of Transportation Fuels and Natural Gas Fuels

1. Introduction

The following guidance is provided by the California Air Resources Board (CARB) to transportation and natural gas fuel suppliers to comply with reporting requirements in sections 95121 and 95122, respectively, of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (title 17, California Code of Regulations, section 95100 et seq.) (MRR).

Unlike MRR, this guidance does not have the force of law, does not establish new mandatory requirements for greenhouse gas (GHG) reporting, and in no way supplants, replaces, or amends any of the legal requirements of the Regulation. Conversely, an omission or truncation of regulatory requirements in this guidance does not relieve operators of their legal obligation to fully comply with all requirements of MRR.

Section 95121 of MRR contains requirements for calculating and reporting greenhouse gas (GHG) emissions that result from the complete combustion of transportation fuels supplied to California end-users. All transportation fuel suppliers meeting the applicability requirements for reporting in section 95101(c) of MRR must report emissions from supplied transportation fuel pursuant to section 95121 of MRR. Transportation fuels include motor gasoline blendstocks, diesel fuel, biomass-derived fuels such as ethanol, renewable diesel and biodiesel, as well as liquefied petroleum gas (LPG) produced at petroleum refineries.

Section 95122 of MRR contains requirements for calculating and reporting GHG emissions that result from complete combustion of natural gas, natural gas liquid (NGL), and LPG products, including propane, produced at natural gas fractionation facilities, liquefied natural gas (LNG) products produced at liquefaction facilities from natural gas received from interstate pipelines, and imported LPG, compressed natural gas (CNG), and LNG products. All natural gas fuel suppliers meeting the applicability requirements for reporting in section 95101(b)(3) and (c) of MRR must report emissions from the supplied fuel pursuant to section 95122 of MRR. For additional guidance on reporting NGL fractionator supplier emissions using Subpart NN of the California Electronic Greenhouse Gas Reporting Tool (Cal e-GGRT), refer to the Reporting and Verification Guidance for Natural Gas Fractionators document.

This document was revised to correct an error in section 2.1.1. Position Holders.

1.1. Summary of 2016 MRR Changes

 The following changes went into effect beginning with 2018 data reported in 2019:

- Addition of requirements to report fuel volumes excluded from emissions reporting (sections 2.1, 2.1.1, 2.2.1, 3.2.2, 3.2.4)
- Removal of reporting requirements for biofuel producers (section 4.1)
- Exclusion of unblended biomass-derived fuels from enterer reporting (sections 2.1, 2.1.2, 2.2.1, 2.7.2)
- Shift in reporting responsibility from "consignees" to "importers" of liquefied petroleum gas (LPG), compressed natural gas (CNG), or liquefied natural gas (LNG) (i.e., "importers of fuel") (sections 3.2.2, 4.7 - 4.12, 5)
- Change in calculation of total emissions for determining rule applicability for entities with emissions from particular source categories listed in section 95122 of MRR (section 3.1)
- Addition of requirements for LNG production facilities to report end-user information (section 3.2.3)
- Change in reporting of exempt biomethane by local distribution companies (section 3.3.4)

2. Suppliers of Transportation Fuels (Section 95121)

This section describes rule applicability requirements as they apply to transportation fuel suppliers; defines the types of transportation fuel suppliers; and explains the GHG calculation, reporting, and data collection requirements for transportation fuel suppliers. In addition, this section provides guidance for completing the third-party verification process, meter accuracy requirements, and includes examples to clarify reporting requirements under different reporting scenarios. These scenarios may be based in part on case-specific factual circumstances and are offered here only as guidance that does not supplant the requirements of MRR.

2.1. Applicability for Transportation Fuel Suppliers

Transportation fuel suppliers must report fuel volumes and associated GHG emissions to CARB if they supply an annual quantity of fossil and/or biomass-derived transportation fuel (listed in Table 1 found in section 2.2.1 of this document) that, if completely combusted, oxidized, or used in other processes, would result in the release of 10,000 metric tons of carbon dioxide equivalent (MTCO₂e) or greater in California (see section 95101(c) of MRR). Fuel suppliers that supply a quantity of fuel that, when completely combusted, oxidized or used in other processes, would result in the release of greater than 25,000 MTCO₂e in California are additionally subject to annual third-party verification as described in section 95103(f) of MRR. Fuel suppliers that supply a quantity of fuel that would result in the release of greater than 25,000 MTCO₂e of emissions that generate a compliance obligation are subject to the requirements of the

Cap-and-Trade Regulation (title 17, California Code of Regulations, section 95801 et seq.).

Fuel that can be demonstrated to have a final destination outside of California, use exclusively in aviation or marine applications, or previous delivery across a California terminal or refinery rack by an upstream position holder or refiner (as discussed further in Section 2.2.4), does not count toward the threshold determination. Beginning with 2018 data reported in 2019, however, fuel suppliers must report the quantity of fuel (in barrels) excluded from emissions calculations for each fuel type listed in Table 2-4 of MRR, pursuant to section 95121(d)(9). Fuel suppliers must have adequate documentation to support excluded volumes during verification (see section 2.5 of this guidance document). Verifiers will consider in the sampling plan the risk of correctable errors and discrepancies, omissions, or misreporting of emissions associated with excluded fuels.

The following guidance explains the reporting applicability requirements for the three types of transportation fuel suppliers identified in sections 95101(c)(1) through (3) of MRR: position holders at fuel terminals, enterers (i.e., importers of transportation fuel to California), and refiners. Beginning with 2018 data reported in 2019, amendments made to section 95121(a)(2) no longer require enterers to report biomass fuels, unless the biomass fuel is a component of a finished fuel containing fossil fuel. Furthermore, biofuel production facilities do not have a requirement to report biofuels delivered outside the bulk system.

2.1.1. Position Holders

MRR section 95102(a) defines a position holder as an entity that holds an inventory position in motor vehicle fuel, ethanol, distillate fuel, biodiesel, or renewable diesel as reflected in the records of the terminal operator or a terminal operator that owns motor vehicle fuel or diesel fuel in its terminal. The term "position holder" does not include inventory held outside of a terminal, fuel jobbers (unless directly holding inventory at the terminal), retail establishments, or other fuel suppliers not holding inventory at a fuel terminal.

Position holders are required to report as a fuel supplier under section 95121 of MRR if they <u>deliver across terminal racks</u> an annual quantity of fossil and/or biomass-derived transportation fuels (listed in Table 1) that exceeds the applicability threshold. A fuel terminal is a storage and distribution facility that is supplied by a pipeline or vessel. A terminal "rack" refers to the fuel pump mechanism that delivers fuel from the terminal storage tanks into trucks, trailers, or railcars for distribution. Collectively, the system of transporting fuel in bulk (typically via pipeline) to fuel terminals is referred to in MRR as the bulk transfer/terminal system. Position holders must aggregate and report fuel deliveries from all terminals (where positions are held) in one GHG emissions data report.

Fuels that are traded or change ownership upstream of a terminal rack (e.g., preterminal or intra-terminal trades) must be reported by the entity (position holder) that

has ownership of the fuel as it is delivered across the rack. The position holder category does not include entities that hold inventory outside of a terminal, retail establishments, or other fuel suppliers not holding inventory at a fuel terminal. Fuel "jobbers," or independent marketers, must report as a position holder only when an inventory position is held at a fuel terminal.

Any position holders who themselves purchase fuels from a terminal rack to further blend or sell across a subsequent rack, do not report emissions from fuels purchased from an upstream rack, as the position holder at the upstream rack will report the emissions from the fuel, in accordance with section 95121(a)(2) of MRR. This hierarchy is consistent with the process of regulation implemented by the California Board of Equalization (BOE). The downstream position holder in this scenario must have adequate documentation to demonstrate to a verifier the type and amount of fuel that was purchased from an upstream rack and subsequently redelivered by the position holder across their rack. Pursuant to section 95121(d)(9), beginning with 2018 data, the downstream position holder must report the volume of fuel obtained from an upstream rack, along with other volumes that were excluded from emissions reporting, for each fuel type listed in Table 2-4 of MRR. See section 2.2.4 of this document for more information related to reporting under this scenario.

2.1.2. Enterers

MRR section 95102(a) defines an enterer as an entity that imports motor vehicle fuel, diesel fuel, fuel ethanol, biodiesel, non-exempt biomass-derived fuel or renewable fuel into California, and who is the importer of record under federal customs law or the owner of fuel upon import into California if the fuel is not subject to federal customs law. Only enterers that import the fuels specified in the definition of enterer outside the bulk transfer/terminal system are subject to reporting under MRR.

Enterers, as defined above, are *only* required to report as a fuel supplier per section 95121 of MRR if they import transportation fuels <u>outside of the bulk</u> transfer/terminal system in quantities exceeding the reporting threshold. Importation outside the bulk transfer/terminal system means that the finished transportation fuel products are imported into California via truck, trailer, railcar, or vessel and are directly distributed to fueling stations or other similar facilities (i.e., the fuel is not delivered to a California fuel terminal facility). An enterer does *not* report imported fuel delivered to a California fuel terminal, whether via pipeline, truck, rail, or vessel, because the fuel terminal is considered part of the bulk transfer/terminal system. The position holder that ultimately delivers the fuel across the terminal rack must report the fuel that was imported into the bulk transfer system.

Enterers of pure (unblended) ethanol, which cannot be transported via pipeline due to the tendency of ethanol to attract moisture, are not required to report pure ethanol fuel delivered to a fuel terminal because this fuel will be reported by the position holder

¹ Note that the California Department of Tax and Fee Administration (CDTFA) now implements taxation of transportation fuels; oversight of taxation and licensing of transportation fuels shifted from the Board of Equalization (BOE) to CDTFA in 2018.

delivering the finished product across the terminal rack. Beginning with 2018 data reported in 2019, enterers do not report any biomass-derived fuels unless they are a blended component of a finished transportation fuel containing fossil fuel, pursuant to section 95121(d)(4) of MRR.

Note: Importers of LPG, CNG, and LNG (i.e., "importer of fuel," as defined in MRR section 95102(a)) do not report under section 95121 of MRR. Importers of fuel must report pursuant to the reporting requirements in section 95122 of MRR. See section 3.2.2 of this document for more information.

2.1.3. Refiners

MRR section 95102(a) defines a refiner as an individual entity or a corporate-wide entity that delivers transportation fuels to end users in California that were produced by petroleum refineries owned by that entity or a subsidiary of that entity.

Refiners must aggregate and report fuel deliveries from all terminals in California where positions are held by the refiner, including terminals located both on and off-site of entity- or subsidiary-owned refineries.

Similar to position holders, refiners are required to report as a fuel supplier if they deliver across terminal racks a quantity of fossil and/or biomass-derived transportation fuels (listed in Table 1) that will result with emissions greater than 10,000 MTCO₂e when combusted. Additionally, refiners must include in the threshold determination and GHG emissions data report all fuels delivered via bulk transfer (pipeline) to other entities that are not licensed by BOE (CDTFA) as a fuel supplier. Bulk transfer fuel deliveries to other BOE (CDTFA) licensed fuel suppliers should not be reported by the refiner because it is the downstream fuel supplier (position holder or refiner) that ultimately distributes the fuel across a terminal rack that is responsible for reporting the fuel.

Pursuant to the introductory paragraph in section 95113 of MRR, petroleum refinery operators and refiners are considered separate reporting entities. Therefore, refineries with emissions reported under sections 95113 and 95115 of MRR may not combine their GHG emissions data report with refiners reporting transportation fuels supplied pursuant to section 95121 of MRR. The two reports must be submitted under separate Cal e-GGRT reporting accounts and must undergo separate verification activities; however, the reporting entity may use the same verification body to verify both reports.

2.2. Reporting Information for Transportation Fuel Suppliers

This section describes the types of fuels that transportation fuel suppliers are required to report pursuant to section 95121 of MRR, and provides guidance on specific reporting requirements and procedures. Transportation fuel suppliers use subpart MM of the Cal e-GGRT reporting tool to report fuel data and GHG emissions to CARB. Section 95103(e) requires reporters of transportation fuels to submit GHG emissions data reports by the reporting deadline, which is April 10 of each year.

2.2.1. Types of Fuels Reported

Transportation fuel suppliers must report the fuels listed in Table 1 that are delivered across a terminal rack in California or imported outside the bulk transfer/terminal system into California pursuant to section 95121 of MRR. Refinery products not listed in Table 1, such as aviation gas, residual fuel oil, and vacuum gas oil, are not required to be reported to CARB as a transportation fuel under section 95121.

Fuels that can be demonstrated to have a final destination outside of California, a use exclusively in marine or aviation applications, or prior delivery across a rack by an upstream position holder or refiner, may be excluded from emissions reporting. Beginning with 2018 data reported in 2019, section 95121(d)(9) requires transportation fuel suppliers to report the fuel volumes excluded from emissions calculations for each fuel listed in Table 2-4 of MRR (i.e., RBOB, Diesel No. 1 and 2, Ethanol, Biodiesel, and Renewable Diesel). As noted previously, any fuel excluded from emissions reporting must have sufficient documentation to support its exclusion. See section 2.5 of this document for more information on acceptable evidence to support exclusion.

The following provides guidance on reporting specific fuels listed in Table 2-5 of MRR, section 95121. This information does not supplant the definitions found in MRR or other California regulations.

Gasoline Blendstocks

- RBOB (Reformulated Blendstock for Oxygenate Blending) is the primary blendstock of motor gasoline in California, and is also referred to as California Reformulated Blendstock for Oxygenate Blending (CARBOB) in California.
- CARBOB is a special formulation of RBOB mandated in California. For reporting purposes, fuel suppliers must report CARBOB as RBOB. Reporters <u>should be careful not to report CARBOB as CBOB</u>, as they are not the same product.
- CBOB (Conventional Blendstock for Oxygenate Blending) is a blendstock commonly used in motor gasoline in states other than California. CBOB is not legal for use as a transportation fuel in California; therefore, it is expected that the CBOB volume delivered in California will be zero. In the event that there are exceptions to this rule, fuel suppliers are required to report any CBOB distributed to California end-users.
- Ethanol is a biomass-derived fuel that is mixed with RBOB to produce finished motor gasoline. Ethanol is usually blended with RBOB at the terminal racks immediately prior to delivery across the rack for distribution.

- Motor Gasoline in California is typically a blend of RBOB (summer or winter; regular, midgrade, or premium) with ethanol. Typical motor gasoline product is E10 (10% ethanol, 90% RBOB). When reporting transportation fuel volumes delivered across the rack or imported outside the bulk transfer/terminal system, reporters must report the volumes by individual blendstock. For example, the supplier would report 100 barrels (bbls) of E10 motor gasoline delivered across a terminal rack as 90 bbls RBOB and 10 bbls ethanol. Blendstocks that are delivered across the rack as unfinished fuel (e.g. RBOB without ethanol) must be reported as either RBOB regular, midgrade, or premium based on their expected octane rating after oxygenate (i.e. ethanol) has been blended.
- Diesel fuel or distillate fuel is required to be reported if the product meets the definitions of distillate fuel oil #1 or #2 and is saleable as diesel fuel in California. This includes both dyed (untaxed) and undyed (taxed) diesel fuel. Fuel suppliers do not report intermediate distillates and heavy distillates that do not meet the definition of diesel #1 or #2 or cannot be sold or used as diesel fuel in California as transportation fuels. As with gasoline blendstocks, fuel suppliers must report the volumes of diesel #1 and #2 that are delivered across terminal racks in California or imported outside the bulk transfer/terminal system. If the product is a biodiesel blend (i.e., diesel #1 or #2 blended with bio-diesel, such as B3 or B20) the reporter must report the volume of each individual blendstock separately. Position holders that are delivering regular petroleum-based CARB diesel fuel (i.e., not a blended biodiesel or renewable diesel product) that may contain up to 5% biodiesel/renewable diesel, must report the product as 100% petroleum diesel (No. 1 or No. 2) unless the blend percentage of biodiesel and/or renewable diesel in the product is known and can be substantiated during verification.
 - ⊙ Biodiesel is a biomass-derived mono-alkyl ester fuel typically produced for distribution as pure biodiesel (defined as ≥ 99% biodiesel) or biodiesel blends such as B5 (5% biodiesel, 95% fossil derived diesel). The position holder delivering the fuel across the California fuel terminal rack must report all biodiesel, whether blended or unblended. As specified in section 95121(a)(2), biodiesel products produced at biodiesel production plants in California and delivered outside the bulk transfer system must be reported by the production facility.
 - Renewable diesel fuel, as defined in section 95102(a) of MRR, is a
 reportable transportation fuel. Renewable diesel, sometimes referred to as
 non-ester renewable diesel, is a diesel fuel produced from non-petroleum
 renewable resources and is not a mono-alkyl ester fuel. Renewable diesel
 is typically delivered in bulk to refineries and/or fuel terminals for blending
 into petroleum-based CARB diesel in various proportions.
 - Beginning with 2018 data reported in 2019, enterers are not required to report biomass-derived fuels unless they are a blended component of a finished transportation fuel, pursuant to section 95121(d)(4) of MRR.

• LPG, which is often sold under the common name of propane, is a flammable mixture of NGLs that is intended for use as a fuel. LPG is primarily a mixture of propane and butane, but can contain small amounts of the other constituents listed under the LPG category in Table 1. LPG, which can be produced from petroleum or natural gas, is reported as a transportation fuel only by the refiners who produce LPG fuel at an entity- or entity-subsidiary owned refinery. Refiners should only report LPG constituents that are produced and sold or delivered in mixtures that could be used as a fuel by an end-user. It is common for refiners to produce and trade bulk NGLs such as butanes and pentanes that are ultimately used as feedstock for further refining processes. Refiners must not report these NGL constituents that are supplied as feedstock for further refining or for uses other than as a fuel because they do not fit the definition of LPG.

Table 1: Transportation Fuels Reported under MRR²

Fuel Types			
RBOB (CARBOB) —Summer	Liquefied Petroleum Gas (LPG)		
Regular	Ethane		
Midgrade	Ethylene		
Premium	Propane		
RBOB (CARBOB) —Winter	Propylene		
Regular	Butane		
Midgrade	Butylene		
Premium	Isobutane		
CBOB—Summer	Isobutylene		
Regular	Pentanes Plus		
Midgrade	Biomass-Derived Fuel		
Premium	Ethanol (100%)		
CBOB—Winter	Biodiesel (≥99%, methyl ester)		
Regular	Renewable diesel (≥99%)		
Midgrade	Rendered Animal Fat		
Premium	Vegetable Oil		

² Adapted from MRR section 95121, Table 2-5.

Distillate Fuel Oils		
Distillate No. 1		
Distillate No. 2		

2.2.2. Reporting Renewable Diesel or other Biomass-Derived Fuels Blended Upstream of the Rack

Renewable diesel, like other fuels, must be reported when the fuel is delivered across a terminal or refinery rack in California. However, it is becoming more common for refiners and position holders to blend renewable diesel into petroleum diesel (CARB diesel) at refineries and fuel terminals (i.e., upstream of terminal racks) and sell the product downstream as CARB diesel rather than as a specific renewable diesel blended product (e.g., R5). Because downstream suppliers and/or rack customers have no knowledge or verifiable information to substantiate that the CARB diesel delivered across the rack contained renewable diesel, it is acceptable and in conformance with the requirements of section 95121 for the refiner/position holder that blended the renewable diesel into the product to assume the entirety of the renewable diesel was delivered across the rack by their company, therefore displacing an equivalent volume of petroleum diesel delivered across their rack.

This situation could also be applied where other biomass-derived (biomass) fuels are introduced upstream of the rack. Therefore, in the case where a refiner or position holder is blending renewable/biomass fuels and subsequently transacting the product as neat petroleum fuels, the refiner/position holder that introduced the renewable/biomass fuel, and has the necessary records to confirm the introduced renewable/biomass fuel volume, is the entity that must report the renewable/biomass fuel in its GHG emissions data report. All petroleum product sold by the blender to other suppliers in bulk would be reported as 100 percent petroleum fuel by the downstream supplier because the downstream supplier would have no information or way of determining how much renewable/biomass fuel was blended into the petroleum fuel.

2.2.3. Bulk Transfers to BOE (CDTFA) Licensed Fuel Suppliers

It is common for refiners to purchase and sell transportation fuel products in bulk with other fuel suppliers. When a refiner sells fuel in bulk, it is delivered to a specified terminal via pipeline, at which point the purchaser of the fuel takes custody. The "owner" of the fuel, whether it is another refiner or a position holder at the terminal, would be the entity responsible for reporting the fuel that is distributed across the rack. To avoid double counting of transportation fuel volumes and emissions, refiners must not include fuel sold and delivered in bulk via pipeline to other fuel suppliers in their GHG emissions data report. However, refiners must report all fuel delivered across the rack by the refiner, including all fuel received via pipeline from other fuel suppliers, if that fuel is delivered by the refiner across a terminal rack. To determine if the purchaser/receiver of the bulk fuel shipment is a "fuel supplier," the refiner must confirm that the entity is a licensed fuel supplier with BOE (CDTFA). If this cannot be confirmed, the refiner must

include the fuel delivered in bulk to the unlicensed entity in its GHG emissions data report as specified in section 95121(d)(3) of MRR. To confirm the BOE (CDTFA) status of an entity, refer to the public information available in the motor vehicle fuel distribution reports available on the If a reporter is unsure of the BOE (CDTFA) status of an entity, please contact CARB staff as early as possible in the reporting year for assistance.

2.2.4. Fuel removed from upstream racks and delivered back into the bulk system

In rare cases, RBOB or diesel fuel may be delivered by a fuel supplier across a terminal or refinery rack and transported by truck or rail (non-bulk shipment) for delivery back into the bulk system at another fuel terminal or refinery. In such instances, the regulated fuel (RBOB or diesel) is delivered across a California rack twice prior to delivery into the market. To prevent double counting, only one of the suppliers is required to report the emissions associated with the fuel, as described in the following two scenarios.

Scenario 1: RBOB delivered across two or more racks

When a fuel supplier (refiner or position holder) purchases RBOB from an upstream supplier at a rack, delivers the RBOB via truck into refinery or facility storage tanks, and subsequently sells the finished product across the storage rack as finished motor gasoline, the point of regulation for reporting is with the upstream supplier that first delivered the fuel across the upstream rack. In this case, sections 95121(a)(2) and (b)(2) require the upstream supplier to report the emissions from each blendstock listed in Table 1 based on the quantity of fuel removed from the rack. The downstream supplier does not meet the definition of "refiner" for the fuel because the fuel was not produced by a petroleum refinery owned by the entity. The downstream supplier also does not meet the definition of "position holder" for this fuel because the storage facilities are not fed via pipeline or vessel, and are therefore not considered a terminal. In this scenario, the downstream supplier must not report emissions from the RBOB delivered from the downstream storage facility that was previously delivered across an upstream California rack. If the downstream supplier is otherwise required to report under MRR, and is excluding the fuel that was received from an upstream supplier's rack, they must be able to provide documentation to the third-party verifier and CARB to substantiate the quantity of RBOB purchased from the upstream rack and delivered across the downstream rack. The entity must report the volume excluded from emissions calculations due to prior delivery across an upstream rack, along with other volumes excluded from emissions calculations, pursuant to section 95121(d)(9) of MRR.

Scenario 2: Diesel delivered across two or more racks

Similarly, it is possible for a diesel supplier to purchase petroleum diesel (CARB diesel) from an upstream supplier at the rack and deliver the fuel to a downstream fuel terminal or storage tank (typically for blending with renewable diesel or biodiesel) for delivery across the rack into the market. If diesel is delivered across a rack two or more times before delivery into the market, the fuel's emissions should only be reported by the

upstream supplier based on the same justification as described Scenario 1. If the downstream supplier is otherwise required to report under MRR, and is excluding the diesel that was received from an upstream supplier's rack, they must be able to provide documentation to the third-party verifier and CARB to substantiate the quantity of diesel purchased from the upstream rack and delivered to the downstream facility. The entity must report the volume excluded from emissions calculations due to prior delivery across an upstream rack, along with other volumes excluded from emissions calculations, pursuant to section 95121(d)(9) of MRR.

2.2.5. Locomotive Refueling Terminals

Locomotive fuel terminals that dispense diesel fuel to locomotive fleets are typically provided with fuel via pipeline from refiners. Locomotive companies are licensed as fuel suppliers by BOE (CDTFA) and are considered fuel suppliers under MRR. Therefore, locomotive companies must conform to the applicability and reporting requirements for transportation fuel suppliers in MRR. Additionally, refiners should not include any fuel sold and delivered in bulk to locomotive fueling terminals in their own GHG emissions data reports (see section 2.2.3 of this document).

2.2.6. Reporting Fuel Supplier Data vs. Refinery Finished Product Data

Fuel volumes reported under section 95121 of MRR are used to calculate GHG emissions from the combustion of the specified transportation fuel(s) used by California end-users; refinery covered product data reported under section 95113 of MRR are used for refinery allowance allocation purposes in the Cap-and-Trade Program. The data used in section 95121 for reporting fuel deliveries are not equivalent to product data reported under section 95113 for refineries. As described in section 95113(I), refinery operators are required to report production quantities for the data year for refinery products and complexity-weighted barrel throughput. The fuels reported pursuant to section 95113(I) represent the total fuels produced at the refinery in the data year. The annual quantity of fuel produced at a refinery is likely different from the annual quantity of fuel delivered by the refiner. For more information on covered product data reporting, refer to the Petroleum Refineries and Coke Calciners Reporting Guidance document.

2.2.7. Fuel Deliveries to Sovereign Indian Lands of a Tribe

For purposes of MRR, fuel deliveries to sovereign Indian lands, as defined in 25 U.S.C. § 81(a)(1), are considered the same as deliveries to other areas outside the State of California. These deliveries are considered exports under section 95121 (and section 95122) of MRR. Emissions from the exported fuel would not be required to be reported as long as the fuel supplier can demonstrate that the fuel delivery has a final destination of sovereign Indian land of a tribe. Under 25 U.S.C. § 81(a)(1), the term "Indian lands" means "lands the title to which is held by the United States in trust for an Indian tribe or lands the title of which is held by an Indian tribe subject to a restriction by the United States against alienation." Examples of this type of "trust" land would include reservations and rancherias. See section 2.5 of this document for acceptable methods of demonstrating that fuel had a final destination outside of California.

Conversely, if a fuel supplier is delivering transportation fuel from sovereign Indian lands into California for use in California, and exceeds the MRR threshold as described above, the fuel supplier would be required to meet the requirements of section 95121 in the same manner as any other fuel supplier delivering transportation fuel for use in California (i.e., as an enterer).

2.3. Determining Covered Emissions

Covered emissions are the emissions that have a compliance obligation under the Capand-Trade Regulation. The covered emissions for a transportation fuel supplier (in units of CO_2e) will equal the sum of CO_2 , CH_4 , and N_2O emissions from all fossil transportation fuels delivered by the supplier, plus the sum of CH_4 and N_2O emissions from the total of all biomass-derived transportation fuels delivered by the supplier. Fuel suppliers calculate total CO_2 emissions by summing the emissions for each transportation fuel reported and applying the fuel-specific emission factors listed in column C of Table MM-1 in Subpart MM of the United States Environmental Protection Agency (U.S. EPA) rule (title 40, Code of Federal Regulations, Part 98). Fuel suppliers calculate CH_4 and N_2O by summing the emissions for each transportation fuel reported using the emissions factors provided in Table 1 of section 95121 of MRR. Transportation fuel suppliers must only report the volumes of each type of fuel supplied in Cal e-GGRT. All emissions calculations are performed automatically in Cal e-GGRT.

2.4. Data Monitoring and Meter Accuracy Requirements for Transportation Fuel Suppliers

Fuel suppliers are required to document internal data monitoring protocols and procedures in a GHG Monitoring Plan, as described in section 95105(c) of MRR. Meters used to measure quantities of fuel used in the calculation of emissions are expected to meet the calibration standards of section 95103(k) of MRR and Subpart MM of the U.S. EPA rule (40 CFR §98.394). Financial transaction meters are exempt from calibration requirements of section 95103(k) if they meet one of the exemption criteria set forth in section 95103(k)(7)(A).

- 1. The supplier and purchaser do not have any common owners and are not owned by subsidiaries or affiliates of the same company;
- 2. The financial transaction meter is also used by other companies that do not share common ownership with the fuel supplier;
- 3. The financial transaction meter is sealed with a valid seal from the county sealer of weights and measures or from a county certified designee; OR
- 4. The financial transaction meter is operated by a third party

There are many different acceptable methods to collect the necessary fuel volume data. Fuel volume data will likely come from terminal meters that measure product flow coming in and/or going out of the terminals via the terminal rack. Other meters and data sources that may be acceptable are terminal tank level (inventory) measurements,

meters exiting refineries destined for fuel terminals, and invoices from upstream fuel suppliers. For all data sources utilized by position holders and refiners, the data must accurately document the net fuel delivered across terminal racks and for all data sources utilized by enterers, the data must accurately document the net fuel imported outside the bulk transfer/terminal system. The fuel supplier must document the method for collecting data in the GHG Monitoring Plan and apply the method consistently year-to-year. If a supplier wishes to use an alternative method, the supplier must submit a request to CARB pursuant to section 95103(m) prior to the year in which the new method would be proposed to be utilized.

2.5. Verification Requirements for Transportation Fuel Suppliers

If reporting greater than $25,000 \text{ MTCO}_2\text{e}$ per year, fuel suppliers must have their report verified by a CARB-accredited verification body. The verification body employees who will conduct the verification of the fuel supplier's GHG emissions data report (i.e., the verification team) must include at least one "transactions sector specialist", pursuant to section 95131(a)(2).

Site visits are required for full verification in the first year verification is required for the reporter and for the first year of each compliance period, or following an adverse or qualified positive verification statement. When site visits are required, the verifier must visit the location where records are kept and meet with staff who are responsible for collecting raw data and completing the GHG emissions data report. At least one verifier attending the site visit must be a "transactions sector specialist," pursuant to section 95131(b)(3). The verification team has the option to visit the site to facilitate the verification in those years that a site visit is not required. Regardless of whether a site visit takes place, verifiers are required to assess the emissions data report and determine whether there is conformance with MRR requirements and reasonable assurance of no material misstatement. For more information on verification requirements, see sections 95130 through 95133 of MRR and the GHG Emissions Verification webpage. A full list of verification bodies and qualified verifiers can be found on CARB's GHG Emissions Verification webpage.

2.6. Acceptable evidence for demonstrating delivery of fuel outside of California, or exclusively for use in aviation or marine applications

Pursuant to section 95121(a)(2) of MRR, fuel suppliers are **not** required to include in their emissions reporting fuel with a final destination outside of California, fuel used exclusively for aviation or marine purposes, or fuel with prior delivery across a rack by an upstream refiner or position holder. Fuel suppliers that exclude fuel from their emissions reporting must have adequate documentation to support these claims during the verification process. Note that most fuels used for aviation purposes (e.g., aviation gasoline, kerosene, jet fuel, etc.) are not fuels that are listed in Table 1, and are therefore not required to be reported to CARB.

For fuel volumes delivered outside of California, verifiers will primarily rely on bills of lading (BOL) to confirm delivery of the fuel to destinations outside of California. In

addition to BOL evidence, fuel suppliers should also have a robust data management system that documents how fuel volumes are determined to be delivered outside of California. This internal system should be documented in the GHG Monitoring Plan. In cases where suppliers are delivering fuel that is not legally saleable in California to destinations outside of California (e.g., CBOB gasoline or non-CARB diesel), the supplier should provide documentation showing that the fuel does not meet California fuel specifications (and is therefore not legally saleable in California). However, verifiers may require a BOL for such deliveries if they believe further assurance is required.

For fuels listed in Table 1 that are delivered to customers that use the fuel exclusively for marine or aviation purposes, verifiers will primarily review BOLs listing specific destinations associated with exclusively marine or aviation fueling operations (e.g., destinations showing delivery to marine fuel terminals, docks, piers, marina locations, airports) to confirm delivery for marine or aviation use. In addition to BOLs, the following systems could be implemented by suppliers to provide additional assurance to verifiers and CARB that fuel used for marine or aviation purposes is accurately excluded from reporting:

- A robust data management system described in the GHG Monitoring Plan that documents how marine or aviation fuels are excluded, including details describing how these fuel volumes are tracked and descriptions of how the supplier tracks deliveries to customers that purchase diesel, both for marine and aviation and non-marine and non-aviation purposes;
- A system that establishes separate customer accounts for customers receiving fuel for marine or aviation use, and establishes a separate product code for the fuel sold to customers' marine and aviation accounts.

2.7. Transportation Fuel Supplier Reporting Examples

This section provides transportation fuel supplier reporting examples for position holders, enterers, and refiners. Note that for simplicity, only the CO_2 emissions are calculated (i.e., CH_4 and N_2O emissions that result from the combustion of fuel are excluded). These examples may be based in part on case-specific factual circumstances and are offered here only as guidance that does not supplant the requirements of MRR.

2.7.1. Example 1: Position Holders

Company A holds an inventory position of diesel (distillate #2) at a fuel terminal, and started the year with 10,000 Barrels (bbls) of diesel stored at the terminal. During the year, Company A purchased and received 100,000 bbls of diesel from a nearby refinery; the fuel was delivered to the terminal via pipeline. Company records indicate that Company A delivered 80,000 bbls across the terminal rack to fuel tanker trucks for distribution, and 5,000 bbls were carried forward as inventory into the following year. Records also show that Company A sold 25,000 bbls of diesel to Company B, which is also a position holder at the terminal. The fuel was sold to Company B prior to the diesel

being delivered across the rack to railcars for distribution. What is the reporting obligation of Company A?

In this scenario, Company A supplied a total of 80,000 bbls of diesel # 2 across the terminal rack. Because Company A was the position holder for the fuel, and the fuel was supplied across the rack to distributors, the emissions from this fuel represent Company A's reporting obligation. This equates to 34,3686 MTCO₂ (80,000 bbls x 0.4296 MTCO₂/bbl= 34,368 MTCO₂); this exceeds the 25,000 MTCO₂e threshold, which means reporting and verification is required. ³ In addition, the fuel supplier would have a compliance obligation in the Cap-and-Trade Program for these emissions. Company A does not report the 25,000 bbls sold to Company B to CARB because the fuel was delivered to Company B upstream of the terminal rack (i.e., an intra-terminal trade). Company A also does not report the fuel held in inventory at the end of the calendar year to CARB, although it may have to report this fuel in a future year depending on how the fuel is distributed.

Company B, as the position holder of the 25,000 bbls it purchased from Company A upstream of the terminal rack, would have a reporting obligation for the emissions from this fuel if it delivered this fuel across the terminal rack. Its obligation equates to $10,740 \ \text{MTCO}_2$ ($25,000 \ \text{bbls} \times 0.4296 = 10,740 \ \text{MTCO}_2$). If this was the only fuel for which Company B was the position holder in that calendar year, it would not meet the requirement for obtaining verification services for its GHG emissions data report, nor would it have a compliance obligation under the Cap-and-Trade program.

2.7.2. Example 2: Enterers

Company X is an ethanol marketer that imports ethanol via railcar from the Midwest into California. Company X imported 100,000 bbls of pure (unblended) ethanol into California. All the ethanol was sold to Company Y, a fuel supplier in California, which received the fuel at its terminal storage tanks. In addition to this activity, Company X also imported 50,000 bbls E85 (85% ethanol, 15% regular summer blend RBOB) via fuel tanker truck into California from Nevada for delivery directly to service stations in California. Is Company X required to report as an enterer? If so, what is the reporting obligation for Company X?

Pursuant to section 95121, Company X does not have to include any of the pure ethanol imported and delivered directly to the fuel terminal when reporting its emissions and determining whether it meets the applicability threshold for reporting. This is because enterers are not required to report unblended biomass fuels delivered into California. However, Company X imported the E85 product outside the bulk transfer/terminal system and the ethanol in the product is a component of a finished transportation fuel, so emissions from this fuel (both the fossil fuel component and the biomass-derived fuel component) must be quantified to determine if Company X exceeds the applicability threshold for reporting of 10,000 MTCO₂e. If the emissions are

³ 0.4296 MTCO₂e/bbl is the CO₂ emission factor for Distillate No. 2 listed in Table MM-1 of 40 CFR Part 98.

greater than the reporting threshold, then Company X must report these emissions to CARB. Company X determines that the emissions are equivalent to:

 $(7,500 \text{ bbls RBOB x } 0.3686 \text{ MTCO}_2/\text{bbl}^4 = 2,765 \text{ MTCO}_2) \text{ from the RBOB, (regular summer blend), plus (42,500 bbls ethanol x <math>0.2422 \text{ MTCO}_2/\text{bbl}^5 = 10,294 \text{ MTCO}_2) \text{ from the ethanol.}$

Given this total, Company X must report as an enterer pursuant to section 95121 because its net total GHG emissions of 13,059 MTCO₂ is greater than the 10,000 MTCO₂e reporting threshold. However, verification is not required (assuming verification has not been required in the past) and they would not be subject to a compliance obligation under the Cap-and-Trade Program because the reported emissions are less than 25,000 MTCO₂e.

2.7.3. Example 3: Refiners

Refiner C is a company that markets transportation fuel, and is the parent company of two subsidiary refineries in California. The two subsidiary refineries produce all grades of RBOB and diesel in very large volumes. The fuel produced at each refinery is delivered via pipeline to seven fuel terminals across California, and each refinery also has a fuel terminal located on-site at the facility. Refiner C sold 10% of the diesel and 20% of the RBOB to other fuel suppliers licensed by BOE (CDTFA). This fuel was delivered via pipeline to the fuel terminals as specified by the customers. In addition, 10% of the diesel fuel was delivered via pipeline to a fuel terminal in Arizona for distribution in Arizona. The remaining volume of fuel (80% of both the RBOB and diesel) was distributed through terminal racks to company-owned fuel tankers and to independent fuel "jobbers." What is Refiner C required to report?

Pursuant to section 95121 of MRR, Refiner C would report all fuel that was delivered across a terminal rack in California where a position was held because they are above the 10,000 MTCO₂e reporting threshold. Refiner C should not report the fuel that was delivered via pipeline to other fuel suppliers because the receiving entity is a BOE (CDTFA) licensed fuel supplier, as stated in the example (see section 2.2.3 of this document). In addition, Refiner C does not have to report fuel that can be documented as having a final destination outside California (see section 2.5 of this document). It is important to highlight that the refiner may aggregate and report the fuel distributed through terminal racks at all terminals where positions were held, including the seven fuel terminals throughout California and the two fuel terminals located at the refineries.

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

This section describes the applicability thresholds, source categories, and GHG calculation, reporting, and data collection requirements for fuel suppliers subject to reporting under section 95122 of MRR. In addition, this section provides guidance for

⁴ CO₂ emission factor for RBOB – Summer (Regular) can be found in Table MM-1 of 40 CFR Part 98.

⁵ CO₂ emission factor for Ethanol (100%) can be found in Table MM-2 of 40 CFR Part 98.

completing third-party verification, and includes reporting examples intended to clarify reporting rules under different reporting scenarios. These scenarios may be based in part on case-specific factual circumstances and are offered here only as guidance that does not supplant the requirements of MRR.

3.1. Applicability Thresholds for Suppliers of Natural Gas, Natural Gas Liquids, Liquefied Petroleum Gas, Compressed Natural Gas, and Liquefied Natural Gas

Sections 95101(c)(4) through (c)(8), and (c)(10) of MRR provide the reporting applicability requirements for suppliers of natural gas, natural gas liquids (NGLs), liquefied petroleum gas (LPG), compressed natural gas (CNG), and liquefied natural gas (LNG) fuels. Pursuant to section 95101(c), fuel suppliers must report if they supply a quantity of fuel that results in GHG emissions greater than the reporting threshold of 10,000 MTCO₂e when combusted, which is roughly equivalent to 188,500 million British thermal units (MMBtu) of pipeline natural gas. Natural gas fractionators, however, must report all NGLs and LPGs supplied regardless of the quantity. Requirements that apply specifically to NGL fractionators can be found in the Reporting and Verification Guidance for Natural Gas Fractionators document. Pursuant to section 95122(a), fuel that can be demonstrated to be destined for use outside of California does not count toward threshold determinations.

Fuel suppliers that supply a quantity of fuel that when completely combusted or oxidized would result in the release of greater than 25,000 MTCO₂e in California are subject to annual third-party verification as described in section 95103(f) of MRR. Fuel suppliers that supply a quantity of fuel that would result in the release of 25,000 MTCO₂e of covered emissions are additionally subject to the requirements of the Cap-and-Trade Regulation and incur a compliance obligation. See the <u>Biomass-Derived Fuels</u> <u>Guidance</u> document for a discussion of biomass fuels that are exempt (i.e., non-covered) from a compliance obligation.

Beginning with 2018 data reported in 2019, entities must combine specified supplier emissions with facility emissions to calculate total emissions for determining rule applicability. Pursuant to section 95101(b)(3), supplier emissions from the following source categories must be included: importers of LPG, CNG, or LNG; operators of intrastate pipelines as described in section 95122; NGL fractionators; and facilities that make LNG products or compressed natural gas products from natural gas received from interstate pipelines as described in section 95122. If the entity's total emissions exceed the 10,000 MTCO₂e reporting threshold, the entity is required to report both facility emissions and specified supplier emissions. Thus, an entity that has both facility and supplier emissions may be required to report even if supplier emissions alone do not result in the release of greater than 10,000 MTCO₂e. Similarly, that entity may be subject to verification and/or Cap-and-Trade even if supplier emissions alone do not result in the release of greater than 25,000 MTCO₂e. This requirement is discussed in greater detail in the Reporting Guidance for Determining Rule Applicability. In addition, if the entity's total emissions exceed the 10,000 MTCO₂e reporting threshold, the entity is required to report both facility emissions and specified supplier emissions.

3.2. Sources Categories

3.2.1. Natural Gas Suppliers

Natural gas suppliers fall into three broad categories: local distribution companies (LDCs), operators of intrastate pipelines, and operators of interstate pipelines, which are only required to report non-emissions gas volume and customer data.

LDCs, defined in MRR section 95102(a), can be public utility gas corporations, publicly-owned natural gas utilities (hereafter, both collectively referred to as "natural gas utilities"), or intrastate pipelines. In all cases, the entity that operates the distribution pipeline that physically delivers the gas to the end-user must report the emissions associated with delivery of natural gas. When gas is delivered to California end-users by an entity other than a natural gas utility, (e.g., a gas producer), the entity that operates the distribution pipeline delivering the gas is considered the supplier and must report under section 95122 as an intrastate pipeline.

LDCs are categorized as follows:

- Public Utility Gas Corporations (PUGC): A PUGC is a gas corporation that is also a public utility as defined by the California Public Utilities Code. All PUGCs delivering gas through pipelines operated by the PUGC entity must report pursuant to section 95122(a)(2) of MRR if the total quantity of gas delivered to all entities on their distribution system (i.e., end-users, pipelines, and other gas utilities) exceeds the reporting threshold of 10,000 MTCO₂e per year.
- Publicly Owned Natural Gas Utilities (POGU): A POGU is a municipal or public corporation, utility district, or joint powers authority that provides natural gas to end users. Like PUGCs, POGUs that deliver gas through pipelines operated by the POGU entity must report pursuant to section 95122(a)(2) of MRR if the total quantity of gas delivered to all entities on their distribution system (i.e., endusers, pipelines, and other gas utilities) exceeds the reporting threshold of 10,000 MTCO₂e per year.

Intrastate Pipelines That Deliver Gas to End-Users: An intrastate pipeline is a distribution pipeline wholly contained within California that is operated by an entity other than a gas utility. Like the natural gas utilities, the operator of an intrastate pipeline that delivers gas to end-users must report pursuant to section 95122(a)(2) of MRR if the total quantity of gas delivered to all entities on their distribution system (i.e., end-users, gas utilities, and/or other pipelines) exceeds the reporting threshold of 10,000 MTCO₂e per year. Entities that operate more than one intrastate pipeline must aggregate data from all pipelines in one GHG emissions data report for the entity.

Interstate Pipelines: An interstate pipeline is not considered an LDC and is subject to separate reporting requirements under MRR. An interstate pipeline is an entity that owns or operates a pipeline that delivers natural gas into California across the state border, and is regulated by the Federal Energy Regulatory Commission. Interstate

pipelines are required to report delivery and customer data to CARB pursuant to section 95122(d)(3) of MRR if the pipeline delivers a quantity of gas exceeding the reporting threshold of 10,000 MTCO₂e into California. Interstate pipelines <u>only report delivery and customer data</u>, and do not report GHG emissions data to CARB. Therefore, interstate pipeline annual GHG emissions data reports do not require third-party verification.

3.2.2. Importers of Fuel (Importers of LPG, CNG, and LNG Products)

Beginning with 2018 data reported in 2019, the point of regulation for imported LPG, CNG, and LNG products is the "importer of fuel" (IOF), as defined in section 95102(a) of MRR. Previously, the point of regulation was the "consignee" of the imported fuel. The definition for IOF identifies the point of regulation under three scenarios:

- 1. When fuel is being imported from outside of the United States into California, the regulated party is the importer of record under federal customs law.
- 2. For imports that cross state lines into California and are not subject to U.S. Customs, when ownership of the fuel transfers to the California customer (i.e., marketer or end user) <u>inside</u> of California, the regulated party is the entity that first holds title to the fuel inside California.
- 3. For imports that cross state lines into California and are not subject to U.S. Customs, when ownership of the fuel transfers to the California customer <u>outside</u> of California, the regulated party is the entity that is the seller of the fuel to the customer in California.

For the purpose of this definition, a "marketer" should be interpreted with reference to the common usage of that term. Here, a marketer may refer to any purchase-selling entity along the supply chain, such as a supplier, retailer, or wholesaler (i.e., any entity along the supply chain except for the producer or end-user). To illustrate how fuel importing scenarios may play out in practice, section 5 of this document provides a number of sample reporting scenarios and identifies the point of regulation under each scenario.

Pursuant to section 95122(a) of MRR, importers must report all imported LPG, CNG, and LNG products, unless the product can be demonstrated to have been delivered to a final destination outside of California. If the imported products are co-mingled or mixed with products produced by an in-state producer and a portion of the co-mingled product is exported back out of California, only the proportion of the exported product mixture that was originally imported can be subtracted to determine reportable imports.

As an example, an importer imports 100 bbls of LPG and holds this product in a storage tank with 300 bbls of LPG procured from an in-state producer. Of the total 400 bbls, only 25% of the product was imported. If the importer then exports 200 bbls of the product back out of California, the total reportable imports that must be reported by the importer would be (100 - (0.25*200)) = 50 bbls of LPG. The importer is not required to report the 300 bbls of LPG procured from in-state producers because LPG produced in California

is reported by the producer of the fuel (i.e. the fractionator or refiner). Beginning with 2018 data reported in 2019, importers of LPG must report the total quantity of LPG excluded from emissions reporting due to a final destination outside of California (section 95122(d)(8)).

3.2.3. LNG Production Facilities

Operators of in-state natural gas liquefaction facilities may be subject to reporting *if*, and only *if*, the LNG production facility is liquefying natural gas received directly from an interstate pipeline (as opposed to natural gas received from a PUGC, POGU, or intrastate pipeline). Operators of LNG production facilities that fall under this category and meet the reporting threshold must report the net energy (in MMBtu) and the associated GHG emissions for LNG produced and delivered in California pursuant to section 95122(a)(4).

Beginning with 2018 data reported in 2019, LNG production facilities are also required to report end-user information for LNG deliveries to industrial facilities and natural gas utility customers, including customer name, address, and the annual quantity of LNG delivered to each customer in MMBtu, pursuant to section 95122(d)(7).

LNG production facilities reporting emissions associated with LNG produced from biomethane are subject to the same requirements as reporting entities that combust biomethane, including reporting the information specified in section 95103(j)(3) of MRR for each biomethane contract. For more in depth information on biomethane reporting, please see the <u>Biomass-Derived Fuels Guidance</u> document.

3.2.4. NGL Fractionators

A fractionator is a facility that produces NGLs separated into one or more of the following individual component products or product mixtures: ethane, propane, butanes, and pentanes plus. Gas plants that process natural gas but do not fractionate NGLs into component products are not considered fractionators. NGL component products can be extracted from produced natural gas or fractionated from bulk NGLs received from upstream natural gas processors or refineries. NGL fractionators must report GHG emissions and data pursuant to section 95122 of MRR regardless of the quantity of NGLs produced at the facility. Beginning with 2018 data reported in 2019, NGL fractionators are also required to report the total quantity of LPG that is excluded from emissions reporting due to a final destination outside of California (section 95122(d)(8)).

For additional guidance for NGL fractionators on reporting using Cal e-GGRT, see the Reporting and Verification Guidance for Natural Gas Fractionators document.

3.3. Reporting Guidance for Natural Gas Suppliers

This section describes the calculation methods and reporting requirements for PUGCs and POGUs in section 3.3.1, and for intrastate pipeline operators in section 3.3.2. This section also contains information on how covered emissions are calculated for natural

gas suppliers, and provides additional guidance on the requirements for reporting biomethane that is delivered by the LDC.

3.3.1. Emissions Calculations for PUGCs and POGUs

PUGCs and POGUs must report natural gas received and natural gas delivered and calculate emissions according to the equation provided in section 95122(b)(6) and shown below, which is a modified version of what appears in 40 CFR Part 98, Equation NN-6 in the U.S. EPA rule:

Equation 1:

$$CO_{2} = \sum_{2i} CO_{2i} - \sum_{2i} CO_{2i} - \sum_{2i} CO_{2i}$$

CO = total net emissions from all natural gas received at the city gate or the state line 2i

CO = total net emissions from natural gas redistributed to or received from other 2j
natural gas transmission companies

CO = total net emissions from gas put on or removed from storage and/or direct 2l

deliveries from producers

 CO_{2i} : CO_{2i} represents emissions from all natural gas coming in through the city gate or received at the state line. The term "city gate" is defined in section 95102(a) to mean any location at which ownership of the gas passes from one party to another.

 ${\it CO}_{2j}$: ${\it CO}_{2j}$ represents emissions from natural gas received for redistribution to, or received from, other natural gas transmission companies. ${\it CO}_{2j}$ is calculated by subtracting natural gas redelivered to other downstream pipelines and gas companies from the natural gas received in-state from upstream pipelines or LDCs. To calculate natural gas received in state from other gas companies, reporters use the equation provided in section 95122(b)(3) as follows:

Equation 2:

$$MMBtu_{total} = (MMBtu_{redelivery} - MMBtu_{receipts})$$

The result of Equation 2 (MMBtu_{total}) is used to calculate CO_{2j} for Equation 1. Because CO_{2j} is *subtracted* from CO_{2i} to calculate total covered CO_2 , redeliveries reduce total reported CO_2 and in-state natural gas receipts increase total reported CO_2 . Note also that the amount of natural gas for redelivery is only calculated if the total amount redelivered in the reporting year is greater than 25,000 MTCO₂e per year. This is to ensure that deductions are only taken for redeliveries to entities that will have a reporting obligation. LDCs are required to submit delivery information pursuant to section 95122(d)(2)(D) of MRR for each delivery made to a downstream LDC or gas

pipeline by uploading the "Natural Gas Deliveries to Pipelines and LDCs" spreadsheet to the Cal e-GGRT Subpart NN report.

 ${\it CO_{2l}}$: ${\it CO_{2l}}$ represents net emissions from storage and direct deliveries from producers. ${\it CO_{2l}}$ is calculated by subtracting the amount of natural gas put into storage from the amount taken out of storage and delivered. Similar to ${\it CO_{2j}}$, ${\it CO_{2l}}$ is subtracted from ${\it CO_{2i}}$ to calculate total ${\it CO_{2}}$. This means that the amount of natural gas put into storage reduces the amount of covered ${\it CO_{2}}$ during the reporting year, while the amount removed from storage increases the amount of covered ${\it CO_{2}}$.

Note: 40 CFR Part 98 of the U.S. EPA rule adds a term to eq. NN-6 for subtracting deliveries to large consumers, who would presumably be reporting that consumption under Subpart C or D. In contrast, pursuant to section 95122(b)(6) of MRR, gas deliveries to large consumers are <u>not</u> subtracted from the emissions total for reporting to CARB. However, pursuant to section 95122(d)(2)(E) of MRR, LDCs are required to report natural gas delivered to each facility registering supply equal to or greater than 188,500 MMBtu during the reporting year for purposes of determining the LDC's covered emissions, as discussed in section 3.3.3 of this guidance document. The emissions data report should only include "deductions" under the CO_{2j} term <u>for</u> deliveries to other pipelines and distribution companies and not to gas consumers. See below for further discussion on the covered emissions calculation.

3.3.2. Reporting Guidance for Intrastate Pipelines

Pursuant to section 95122(d)(4) of MRR, intrastate pipelines report data differently than natural gas utilities (POGUs and PUGCs). Operators of intrastate pipelines are to report total gas delivered to all users as the CO_{2i} value found in section 95122(b)(6), or Equation 1 of this guidance document, instead of natural gas received at the city gate. Also, intrastate pipelines are required to report net redeliveries to other LDCs or gas pipelines as described above under the CO_{2i} parameter; however, intrastate pipelines must report a value of zero for the CO_{2i} parameter. These requirements ensure that intrastate pipelines report all the gas delivered through their pipelines, and subtract out only the net redeliveries to other pipelines or LDCs. Intrastate pipelines, like other LDCs, are required to report natural gas delivered to each facility registering supply equal to or greater than 188,500 MMBtu during the reporting year for purposes of determining the pipeline operator's covered emissions.

3.3.3. Calculating Covered Emissions for Natural Gas Suppliers

The covered emissions for a supplier of natural gas are equal to the total emissions from all fuel delivered to end users (not including transfers to other natural gas suppliers), as calculated pursuant to sections 95122(b)(2) through (8) of MRR, minus the sum of fuel that is delivered to other covered facilities in California.

The covered emissions calculation for natural gas suppliers depends on data beyond the operational boundaries of the natural gas supplier; therefore, the suppliers do not calculate their own covered emissions. Covered emissions for natural gas suppliers are calculated by CARB staff as specified in section 95122 of MRR.

LDCs are required to report customer information and delivered energy (in MMBtu) pursuant to section 95122(d)(2)(E) of MRR, for each facility registering supply equal to or greater than 188,500 MMBtu during the reporting year. LDCs must additionally report the customer information required under U.S. EPA rule section 40 CFR § 98.406(b), which includes the customer name, address, and meter number(s). If available, LDCs are required to report the ARB ID of each facility in addition to the customer information. Full and complete reporting of this information is necessary for CARB to accurately and expeditiously calculate the annual covered emissions value for an LDC.

3.3.4. Biomethane Reporting

Some LDCs may deliver biomethane through their pipelines and distribution systems. The LDC may contractually purchase the biomethane on behalf of an end user, or may provide delivery of the biomethane without taking ownership. Beginning with 2018 data reported in 2019, an LDC can elect to report delivered biomethane as exempt under either contractual scenario. If the biomethane is claimed as "exempt" (i.e., a fuel without a CO₂ compliance obligation, as defined in section 95852.2 of the Cap-and-Trade Regulation), the requirements for reporting the biomethane are the same as if exempt biomethane was being combusted by the operator of a stationary fuel combustion facility. This means that the reporting entity must meet the requirements in section 95103(j) of MRR and provide sufficient documentation to the verifier to identify the biomethane as exempt. In the case where the LDC is delivering biomethane to an end user without taking ownership of the fuel, the LDC would have to coordinate with the purchaser of the biomethane to provide the necessary documentation to demonstrate eligibility of the biomethane during verification. In all cases, the verifier must follow the requirements of section 95131(i) of MRR to verify the biomethane.

Natural gas suppliers reporting exempt emissions associated with biomethane are subject to the same requirements as reporting entities that combust biomethane, including reporting the information specified in section 95103(j)(3) of MRR for each biomethane contract. For more in depth information on biomethane reporting, please see the Biomass-Derived Fuels Guidance document.

3.4. Reporting Examples for Natural Gas Suppliers

This section provides reporting examples for each type of natural gas supplier, including gas utilities, intrastate pipelines, and interstate pipelines. Examples for NGL fractionators can be found in the Reporting and Verification Guidance for Natural Gas Fractionators document.

3.4.1. Most of the equations for calculating emissions and product data are built in to the Cal e-GGRT tool. These examples are intended to help clarify what data is input into the tool and how the data is used. These

examples will also assist verifiers in understanding the reporting requirements.

3.4.2. Example 1: Natural Gas Supplier – Public Utility Gas Corporation

A PUGC imports 25,000,000 MMBtu of pipeline-quality natural gas (gas) at the California border (its city gate), and receives another 4,000,000 MMBtu of gas from another in-state public utility gas corporation. The transactions are shown below. What is the total reportable CO₂ in metric tons for the PUGC?

Amount of Fuel (MMBtu)	Disposition of the Fuel	
25,000,000	Total received at California border	
2,000,000	Redelivered to intrastate pipeline	
5,000,000	Redelivered to another public utility gas corporation	
12,900,000	Delivered to final customers	
4,000,000	Sold to power plant	
100,000	Sold to stationary combustion source	
1,000,000	Injected into storage	
600,000	Removed from storage and delivered to final customers	

Amount of Fuel (MMBtu)	Received from	
4,000,000	Received inside California from another public utility gas corporation	

As discussed in section 3.3.1 of this guidance document, natural gas suppliers must use Equation 1 for calculating natural gas delivered and received $(CO_2 = \sum CO_{2i} - \sum CO_{2i} - \sum CO_{2i})$.

Because the utility in the example transacts only pipeline quality natural gas, the calculations are shown in MMBtu until the final step of calculating total CO₂e.

 CO_{2i} = Total amount received at "city gate" is **25,000,000 MMBtu**. In this case, the California border acts as the city gate.

 CO_{2j} = (MMBtu_{redelivery} – MMBtu_{receipts}). Redeliveries are made when the utility sells or transfers fuel to another licensed utility or pipeline. This does NOT include any endusers of the gas, which are reported separately and not included in the calculation of

 CO_2 . Receipts are the sum of gas received from other utilities or intrastate pipelines. Gas should be included as a 'receipt 'only when the gas has NOT already been included in the CO_{2i} (the city gate) value.

= (2,000,000 [redelivered to intrastate pipeline] + 5,000,000 [Redelivered to another public utility gas corporation]) – (4,000,000 [Received inside California from another public utility gas corporation]) = **3,000,000 MMBtu**

 CO_{2l} = [MMBtu injected into storage] – [MMBtu removed from storage]. This is the balance of fuel stored and removed by the utility in its own storage or storage made on behalf of the utility.

$$= (1,000,000 - 600,000) = 400,000 \text{ MMBtu}$$

Finally, $CO_2 = \sum CO_{2i} - \sum CO_{2j} - \sum CO_{2l} = 25,000,000 - 3,000,000 - 400,000 = 21,600,000$ MMBtu * 53.02 kg CO_2 /MMBtu * .001 MT/kg = **1,145,232 MTCO₂e**.

In this example, the PUGC's emissions would be 1,145,232 MTCO₂e.

3.4.3. Example 2: Natural Gas Supplier - Intrastate pipeline

In 2012, an intrastate pipeline receives 10,075,500 MMBtu of pipeline quality natural gas from a large interstate pipeline and delivers it to the following entities:

- A public utility gas corporation: 8,000,000 MMBtu
- A combined-cycle natural gas power plant: 1,900,000 MMBtu
- A tomato processing plant: 100,000 MMBtu

What is the total CO₂ reported for the intrastate pipeline?

Pursuant to section 95122(d)(4) of MRR, intrastate pipelines must report total gas delivered to all entities as the CO_{2i} value found in section 95122(b)(6), or Equation 1 of this guidance document, instead of natural gas received at the city gate from the upstream pipeline. Also, intrastate pipelines must report all redeliveries to other LDCs or pipelines as the CO_{2i} value, and must report a value of zero for the CO_{2i} parameters.

The calculation for intrastate pipelines quantifies the total emissions from the quantity of gas delivered to all entities (CO_{2i}), *minus* the total emissions from the gas redelivered to downstream LDCs or pipelines (CO_{2i}). The net remainder is equivalent to the total emissions from the deliveries that were made only to end-users. Therefore, the emissions calculation depends only on the quantity of fuel delivered rather than the quantity received from the upstream pipeline. In this reporting example, note the small discrepancy between the gas received from the upstream interstate pipeline (10,075,000 MMBtu) and the total gas delivered. This inconsistency is likely the result of meter inaccuracies inherent in the system.

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To determine the total CO₂ emissions, the intrastate pipeline must perform the following steps:

<u>Determining CO_{2i} </u>: Pursuant to section 95122(d)(4), the intrastate pipeline operator in this example reports the total gas delivered to all end users as the CO_{2i} parameter:

$$CO_{2i} = (8,000,000 + 1,900,000 + 100,000) = 10,000,000 \text{ MMBtu}$$

<u>Determining CO_{2j}</u>: Pursuant to section 95122(d)(4), the intrastate pipeline operator in this example reports the total gas redelivered to all downstream pipelines or LDCs as the CO_{2j} parameter:

 $CO_{2j} = 8,000,000 \text{ MMBtu}$

Calculation of Total CO₂:

$$CO_2 = \sum CO_{2i} - \sum CO_{2j} - \sum CO_{2l}$$

= $(10,000,000 \text{ MMBtu} - 8,000,000 \text{ MMBtu} - 0) * 53.02 \text{ kg CO}_2/\text{MMBtu} * .001 \text{ MT/kg} = 106,040 \text{ MTCO}_2.$

In this example, the intrastate pipeline's emissions would be **106,040 MTCO₂**. This value represents the total emissions reported to CARB.

The intrastate pipeline is also required to report customer name, address, meter number, and amount of natural gas delivered to each facility registering supply equal to or greater than 188,500 MMBtu during the reporting year (which equates to about 10,000 MTCO₂). In this example, sales to the power plant would need to be reported, while the sales to the tomato processing plant, which is slightly less than 188,500 MMBtu, would not. The quantity delivered to the PUGC would be reported in the "redeliveries to downstream pipelines and LDCs" spreadsheet in Cal e-GGRT in addition to reporting the redelivery under the CO_{2j} parameter. Additionally, the intrastate pipeline would report how much natural gas was delivered to residential, commercial and industrial end-users, if applicable.

3.4.4. Example 3: Natural Gas Supplier - Publicly Owned Natural Gas Utility

A POGU (i.e., a municipal utility) delivers natural gas to residents and businesses within the city limits. An annual quantity of 20,000,000 MMBtu of natural gas is delivered to the municipal utility's city gate by a local gas utility (PUGC). What are the reporting requirements for the municipal utility?

Municipal utilities (POGUs) who receive natural gas at one or more city gates from larger utilities (PUGCs) with no production or storage in their territory have relatively straightforward reporting requirements. In this case, the POGU would report 20,000,000 MMBtu of natural gas received from the PUGC and purchased at the city gate (CO₂i). They would also report sales back to the PUGC across the city gate for the purposes of system balancing. For these transactions, invoices will typically account for *net* flows to

the municipal utility; therefore, invoices may be used to substantiate net gas deliveries to the city gate from the PUGC during verification.

Like PUGCs and intrastate pipelines, POGUs are required to report customer name, meter number, and amount of natural gas delivered to each facility registering supply equal to or greater than 188,500 MMBtu during the reporting year pursuant to section 95122(d)(2)(E) of MRR.

3.5. Data Monitoring and Meter Accuracy Requirements for Suppliers of Natural Gas Fuels

Fuel suppliers are required to document internal data monitoring protocols and procedures in a GHG Monitoring Plan, as described in section 95105(c) of MRR. Meters used to measure quantities of fuel used in the calculation of emissions must meet the calibration standards of section 95103(k) of MRR and quality assurance and control requirements pursuant to section 95122(c) of MRR and Subpart NN of the U.S. EPA rule section 40 CFR §98.404. Financial transaction meters are exempt from calibration requirements if they meet at least one of the exemption criteria set forth in section 95103(k)(7)(A):

- 1. The supplier and purchaser do not have any common owners and are not owned by subsidiaries or affiliates of the same company;
- 2. The financial transaction meter is also used by other companies that do not share common ownership with the fuel supplier;
- 3. The financial transaction meter is sealed with a valid seal from the county sealer of weights and measures or from a county certified designee; or
- 4. The financial transaction meter is operated by a third party.

Additionally, pursuant to section 95103(k)(7)(C), non-financial transaction meters used by Public Utility Gas Corporations are exempt from calibration requirements in sections 95103(k)(1)-(6) if the PUGC can demonstrate during verification that the meters are operated and maintained in conformance with the measurement accuracy requirements of the California Public Utilities Commission General Order 58A (1992).

There are many different acceptable methods to collect the necessary natural gas data. The method for collecting data must be documented in a GHG Monitoring Plan and applied consistently year-to-year. If a natural gas supplier wishes to use an alternative method, the supplier must submit a request to CARB pursuant to section 95103(m) prior to the year in which the new method would be utilized.

3.6. Verification Requirements for Suppliers of Natural Gas Fuels

Once a supplier's emissions are greater than or equal to 25,000 MT CO₂e in a calendar year, the fuel supplier must have its reports verified by a CARB-accredited verification

body until it meets cessation requirements. The verification team is required to have at least one "transactions sector specialist."

A full list of verification bodies and qualified verifiers can be found on CARB's GHG Emissions Verification webpage.

Site visits are required for full verification in the first year verification is required for the reporter and the first year of each compliance period or following an adverse verification statement. In all years, verifiers are required to assess the emissions data report and determine whether there is reasonable assurance of conformance with MRR requirements and reasonable assurance of no material misstatement. The verification team has the option to visit the site to facilitate the verification in those years that a site visit is not required. When site visits are required, the verifier must visit the location where records are kept and will want to meet with the entity's staff that is responsible for completing the GHG emissions data report. For more information on verification requirements, see sections 95130 through 95133 of MRR and the GHG Emissions Verification webpage.

4. Frequently Asked Questions

This section provides answers to frequently asked questions that CARB has received from fuel suppliers. These answers may be based in part on case-specific factual circumstances and are offered here only as guidance that does not supplant the requirements of MRR.

4.1. Are ethanol and biodiesel enterers or producers required to report the volume of ethanol they deliver into California?

No. Beginning with 2018 data reported in 2019, enterers only report the volume of finished fossil-blended fuel that is delivered outside the bulk system (i.e., outside the pipeline/terminal system), pursuant to section 95121(a)(2). If unblended biofuel is imported or produced in California, it is almost certain that this fuel will be reported by the eventual position holder delivering the finished blended fuel across a terminal rack. Therefore, these volumes should not be reported by the enterer or producer, unless there is reason to believe the volume is not entering the bulk system. An enterer is only required to report finished fossil fuels (e.g., gasoline or diesel) that are imported and delivered in California outside the bulk terminal system. An example would be an enterer delivering a finished blended fuel (e.g., E10 gasoline or E85) across the California border directly to customers or service stations. Under this scenario, assuming the enterer's emissions are greater than 10,000 MTCO₂e, the enterer would report the emissions from the RBOB component and the ethanol component of the finished fuels, as specified in section 95121(b)(1). Please contact CARB staff if you need to discuss whether biofuel volumes entered or produced by your reporting entity are required to be reported or excluded from your emissions data report.

4.2. If an LPG importer can demonstrate that a portion of the gallons imported into California were subsequently exported back out of the

State, can the importer exclude the exported volume from its emissions data report?

Yes, as long as that portion can be demonstrated to have been delivered to a final destination outside of California. Typically, this would mean that the importer has documentation that tracks the shipment or "batch" of imported LPG, and can demonstrate that the imported "batch" of LPG was subsequently exported to a final destination outside of California (as listed on a BOL, for example).

However, if the imported LPG is co-mingled or mixed with products produced by an instate producer, and a portion of the co-mingled product is exported back out of California, only the proportion of the exported product mixture that was originally imported can be excluded from the emissions data report. See section 3.2.2 for an example.

4.3. If an in-state LPG producer delivers LPG to an in-state marketer, and the BOL indicates the delivery destination was the marketer's in-state storage facility, how can the producer demonstrate that some or all of this shipment was exported should the marketer export LPG from this storage facility out of California?

The producer of the LPG can only exclude volumes from their emissions calculations if there is documentation (e.g., a BOL) demonstrating that the produced LPG had a final destination outside of California. Because the BOL generated for the first transaction only shows delivery to an in-state storage facility, it is unlikely the producer can track and demonstrate that the same shipment or "batch" of LPG was subsequently exported. Therefore, the amount of LPG provided to the marketer must be reported. The producer can only exclude this volume if they can secure documentation from the in-state marketer that the exact same batch delivered to the facility was subsequently exported out of California.

4.4. Our facility operates a pipe segment that runs from our facility boundary to an interconnection point with an interstate pipeline from which we receive our purchased natural gas as an end user. Do we have to report as an intrastate pipeline operator? What if a neighboring facility that is owned and operated by a different entity also receives gas from the interstate pipeline via the same pipe segment connection?

No. Neither situation described above would require reporting as an operator of an intrastate pipeline. In both cases, the operators of the end-user facilities are receiving gas that was directly nominated to and scheduled for delivery via the interstate pipeline. The operators of both facilities must report the gas as received from the appropriate interstate pipeline when reporting natural gas purchase information in Subpart A of Cal e-GGRT, as required by section 95115(k).

4.5. Our gas plant processes field gas extracted from neighboring oil and gas production wells, and delivers final pipeline quality gas to a

neighboring oil and gas producer. The remaining pipeline quality gas is sold to a utility and injected into the gas utility's distribution pipeline. Our facility reports as an NGL fractionator under Subpart NN of Cal e-GGRT. Do we also need to report as an intrastate pipeline operator delivering to end users?

Yes. If the operator of the gas plant is delivering gas through a pipeline to one or more end-users, then the operator must report as an operator of an intrastate pipeline as required by section 95122(a)(2). If the gas plant is also reporting as an NGL fractionator, the operating entity must report emissions under both Supplier Types (intrastate pipeline and NGL fractionator) in Subpart NN of Cal e-GGRT. Note that the intrastate pipeline will have zero covered emissions if all of the end-users to which they are delivering gas are covered entities under the Cap-and-Trade Program.

4.6. Starting with 2015 data, LDC covered emissions will have a compliance obligation under the Cap-and-Trade Regulation. When will LDCs be notified of their final covered emissions value that is calculated by CARB staff?

CARB staff is not able to begin calculating covered emissions until after verified emissions data is received for all covered entities. Pursuant to section 95852(c) of the Cap-and-Trade Regulation, CARB staff will provide covered LDCs with their final covered emissions value within 30 days after the verification deadline. CARB staff may provide draft covered emissions reports as necessary to resolve discrepancies to a subset of LDCs prior to this date. To ensure an efficient process, LDCs must report enduser data consistently and accurately as required by section 95122(d)(2)(E). Specifically, they should take care to ensure names, addresses, meter numbers, and CARB IDs of end-user facilities are reported accurately and consistently from year to year, and that the quantity of gas delivered to each facility accurately reflects the net amount delivered to that particular facility (including all smaller billing accounts that may be in addition to the larger volume accounts for a particular facility).

4.7. Section 95102(a) of MRR includes two definitions for "importer" – "importer of fuel" and "importer of record." Which one is applicable to importers of LPG, CNG, or LNG, as identified in section 95122(a)(3)?

The Importer of Fuel (IOF) definition applies to importers of LPG, CNG, or LNG, and defines the point of regulation for these imported fuels. Section 95102(a) of the 2016 MRR defines the IOF as:

...An entity that imports fuel into California and who is the importer of record under federal customs law. For imported fuel not subject to federal customs law, the "importer of fuel" is the owner of the fuel upon its entering into California if the eventual transfer of ownership of the product to an end user or marketer located in California occurs at a location inside California. However, where the transfer of ownership of the fuel to a California end user or marketer occurs at a location outside of California, the "importer of fuel" is the producer, marketer, or distributor that is the seller of the fuel to the end

user or marketer located inside California. Pursuant to section 95122, only importers of liquefied petroleum gas, compressed natural gas, and liquefied natural gas are subject to reporting as an importer of fuel.

The IOF is also the "importer of record under federal customs law" when fuel is being delivered from outside the United States into California. However, in cases when fuel is being delivered from another state into California, the IOF is not always synonymous with the importer of record.

4.8. I am a refiner that sells odorized and non-odorized propane to California customers, and am the regulated entity for reporting imported propane pursuant to the IOF definition. Am I responsible for reporting emissions from non-odorized propane, or are my customers, who odorize the propane, responsible for reporting?

Under this scenario, the refiner is responsible for reporting the non-odorized propane. Section 95102(a) of MRR defines LPG as "a flammable mixture of hydrocarbon gases used as a fuel that includes both odorized and non-odorized variants". If the propane being imported meets the MRR definition of LPG, the importer, as defined by the IOF definition, must report the full imported quantity of propane regardless of whether it is odorized or non-odorized when delivered to California customers.

4.9. As a fuel broker, I assist California customers with purchasing out of state propane and arranging transportation to their California destination. Am I subject to reporting as an IOF if I never take ownership of the imported fuel?

No. If an entity does not hold title to the imported fuel at any point in the transaction chain, the entity does not meet the MRR IOF definition and is not subject to reporting. Refer to Section 3.2.2 for further guidance on determining the point of regulation of imported propane.

4.10. When transfer of ownership of imported fuel to a California customer occurs outside of California, the IOF definition states that the importer is the "seller of the fuel to the end user or marketer located inside California." What is the criteria for determining if a marketer or end-user is located inside California?

When the importer is not subject to U.S. Customs, the reporting obligation generally lies with the entity that first sells the fuel to a customer in California, where the origin of the fuel is outside of California and the destination is a location inside of California. For an entity to be considered an "end user or marketer located inside of California," as the term is used in the IOF definition, the end user or marketer generally must receive the fuel at a location in California.

4.11. I am an importer of propane (i.e., LPG) subject to MRR reporting. Do I report my LPG in Cal e-GGRT under the product name "LPG" or "LPG Propane"?

Figure 1 below shows the Cal e-GGRT reporting interface for importers of LPG in which fuel volumes and emissions for different fuels are reported. As shown in Figure 1, Cal e-GGRT allows importers of LPG to report LPG volumes under the generalized product name of "LPG" or by individual LPG components. Note that "LPG" and "LPG Propane" are listed as separate fuels.

Figure 1: Cal e-GGRT Reporting Interface for Importers of LPG

Supplier Type * In-State LNG Producers, and Importers of LPG, CNG, or LNG Add/Change						
GHG SUMMARY						
Products ^{1, 3}	CO ₂ (metric tons)	CH4 (metric tons) ⁴	CO ₂ e of CH ₄ (metric tons) ⁴	N ₂ O (metric tons) ⁴	CO2e of N2O (metric tons) ⁴	5 2
☐ LPG						Т
☐ LPG Ethane						
□ LPG Ethylene						
☐ LPG Propane						Т
□ LPG Propylene						Т
☐ LPG Butane						Т
□ LPG Butylene						Т
■ LPG Isobutane						Т
LPG Isobutylene						
■ LPG Pentanes Plus						

For MRR reporting purposes, "LPG," which is often commercially marketed as "propane," refers to a mixture of hydrocarbon gases composed primarily of propane and butane, whereas "LPG Propane" refers to the unblended propane constituent that is later blended with other hydrocarbon gases to make commercial LPG. Consequently, the default CO₂ emission factors for LPG and LPG Propane used in Cal e-GGRT are different. Reporting LPG as unblended LPG Propane would result in underreporting of emissions and is considered a reporting error.

If the importer knows the composition of the LPG imported into California, they must report the LPG volume by individual component pursuant to section 95122(b)(9). For example, an LPG importer could report 21,400 barrels of LPG with known composition as 20,000 barrels of LPG Propane, 1,000 barrels of LPG Butane, and 400 barrels of LPG Propylene. However, if the composition of the imported LPG is not known, the LPG volume must be reported under the product name" LPG."

5. Importer of Fuels: Reporting Scenarios

To clarify the point of regulation for importers of CNG, LNG, and LPG, a number of reporting scenarios are provided below. These scenarios may be based in part on case-specific factual circumstances and are offered here only as guidance that does not supplant the requirements of MRR. For each scenario, the scenario type and regulated entity are identified, and an explanation for the point of regulation is provided. The scenario type corresponds to one of the three general scenarios identified in the IOF definition.

Scenario Type:

- 1. Fuel imported from outside of the U.S. into California;
- 2. Fuel imported from within the U.S. into California: transfer of title inside of California; and
- 3. Fuel imported from within the U.S. into California: transfer of title outside of California.
- Canadian Vendor A sells propane to Customer B, with title transfer to Customer B occurring in Canada and the destination of the fuel shipment being California. Customer B is the importer of record under U.S. Customs.

Scenario Type: 1 - Fuel imported from outside of the U.S. into California.

Point of Regulation: Customer B.

Pursuant to the IOF definition in MRR, the "importer of record" under U.S. Customs law is the entity that must report the emissions from the imported fuel.

2. Same situation as (1); however, the title transfers from Vendor A to Customer B upon delivery in California. Customer B is still the importer of record under federal customs law.

Scenario Type: 1 - Fuel imported from outside of the U.S. into California.

Point of Regulation: Customer B

Customer B is still the importer of record under federal customs law, and therefore Customer B is required to report the emissions from the imported fuel regardless of where title is transferred from Vendor A to Customer B.

3. Marketer A purchases fuel in North Dakota from Producer B and takes title to the fuel once it is loaded onto the rail car in North Dakota. Marketer A has a contract to sell the fuel to a counterparty, Distributor C, and the agreed upon destination for the delivered fuel is a rail terminal inside California. Title is transferred to Distributor C at the rail terminal in California.

Scenario Type: 2 - Fuel imported from within the U.S. into California: transfer of title inside of California

Point of Regulation: Marketer A

In this scenario, the origin point is a U.S. location outside of California (i.e., North Dakota), and the destination of the delivery is a point inside of California. Distributor C is the first entity to receive the fuel in California; therefore, Distributor C is considered a California marketer or end user. The title transfers to the California customer inside of California. Therefore, scenario 2 applies and the first entity to hold title to the fuel upon entering California is the regulated entity, which is Marketer A

4. Same situation as (3); however, title is transferred from Marketer A to Distributor C at a location outside of California (e.g., Marketer A briefly holds title to the fuel upon it entering the rail car in North Dakota, and title is flash transferred to Distributor C while still in North Dakota).

Scenario Type: 3 - Fuel imported from within the U.S. into California: transfer of title outside of California

Point of Regulation: Marketer A.

For the same reason as stated in (3), Distributor C is considered the California marketer or end user. However, title transfer occurs outside of California in this case. Therefore, scenario 3 applies and the seller of the fuel to the California customer is the regulated entity, which is Marketer A.

5. Vendor A stores commingled propane (i.e., propane originating from various locations, possibly even California) at a storage facility in Nevada. Distributor B dispatches a truck from California to pick up a load of commingled propane purchased from Vendor A, taking title to the fuel at the NV storage facility. Distributor B delivers the fuel via truck into California to their California storage tank for sale to customers.

Scenario Type: 3 - Fuel imported from within the U.S. into California: transfer of title outside of California

Point of Regulation: Vendor A

Similar to (4), the title transfers to the California customer outside of California. Therefore, the IOF is the "seller of the fuel to the end user or marketer located inside California." In this scenario, Distributor B is the end user or marketer located inside California and Vendor A is the seller. Therefore, Vendor A must report emissions from this imported fuel.

Table 2: Summary of Reporting Scenarios

	Description/ Origin of Fuel	Transfer of Title	Scenario Type	Point of Regulation
1	Canadian Vendor A sells to Customer A	Canada	1	Customer B (importer of record)
2	Canadian Vendor A sells to Customer A	California	1	Customer B (importer of record)
3	Marketer A in North Dakota sells to Distributor C	Inside CA	2	Marketer A
4	Marketer A in North Dakota sells to Distributor C	Outside CA	3	Marketer A
5	Vendor A in Nevada to Distributor B	Outside CA	3	Vendor A

The above table summarizes the location of title transfer and the point of regulation for all five scenarios. As presented above, the intent of the IOF definition is to rely on the U.S. Customs documentation to identify the importer of record for fuel imported from outside the U.S. For fuel imported within the U.S. across state lines into California, the IOF definition assigns the seller of the fuel to the California customer as the IOF, regardless of whether title transfers inside or outside of California.

Please contact CARB staff at ghgreport@arb.ca.gov if you require guidance on a particular import scenario.

6. Additional Information

Detailed training materials for reporting using Cal e-GGRT: https://ww2.arb.ca.gov/mrr-tool.

The GHG Mandatory Reporting Regulation, with full requirements: https://ww2.arb.ca.gov/mrr-regulation.

Additional reporting and applicability guidance documents to assist reporters in complying with the MRR: https://ww2.arb.ca.gov/mrr-guidance.

- Reporting Guidance for Determining Rule Applicability:
 https://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/applicability-general.pdf
- Biomass-Derived Fuels Guidance: https://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/biomass.pdf

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• Reporting and Verification Guidance for Natural Gas Fractionators: https://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/ngl-fractionator.pdf

Contact the MRR helpdesk: ghgreport@arb.ca.gov.

For help with reporting or verification, please contact the appropriate staff member: https://ww2.arb.ca.gov/mrr-contacts.