

Oregon Greenhouse Gas Reporting Program Verifier Training

Course 4: Fuel Suppliers

Matt Steele
Greenhouse Gas Reporting Specialist
Oregon Department of Environmental Quality
3PVerify@deq.state.or.us

Agenda

1. Sector overview
2. Fuel supplier reporting requirements
3. Links with the Clean Fuels Program
4. Verification process
5. Reporting examples

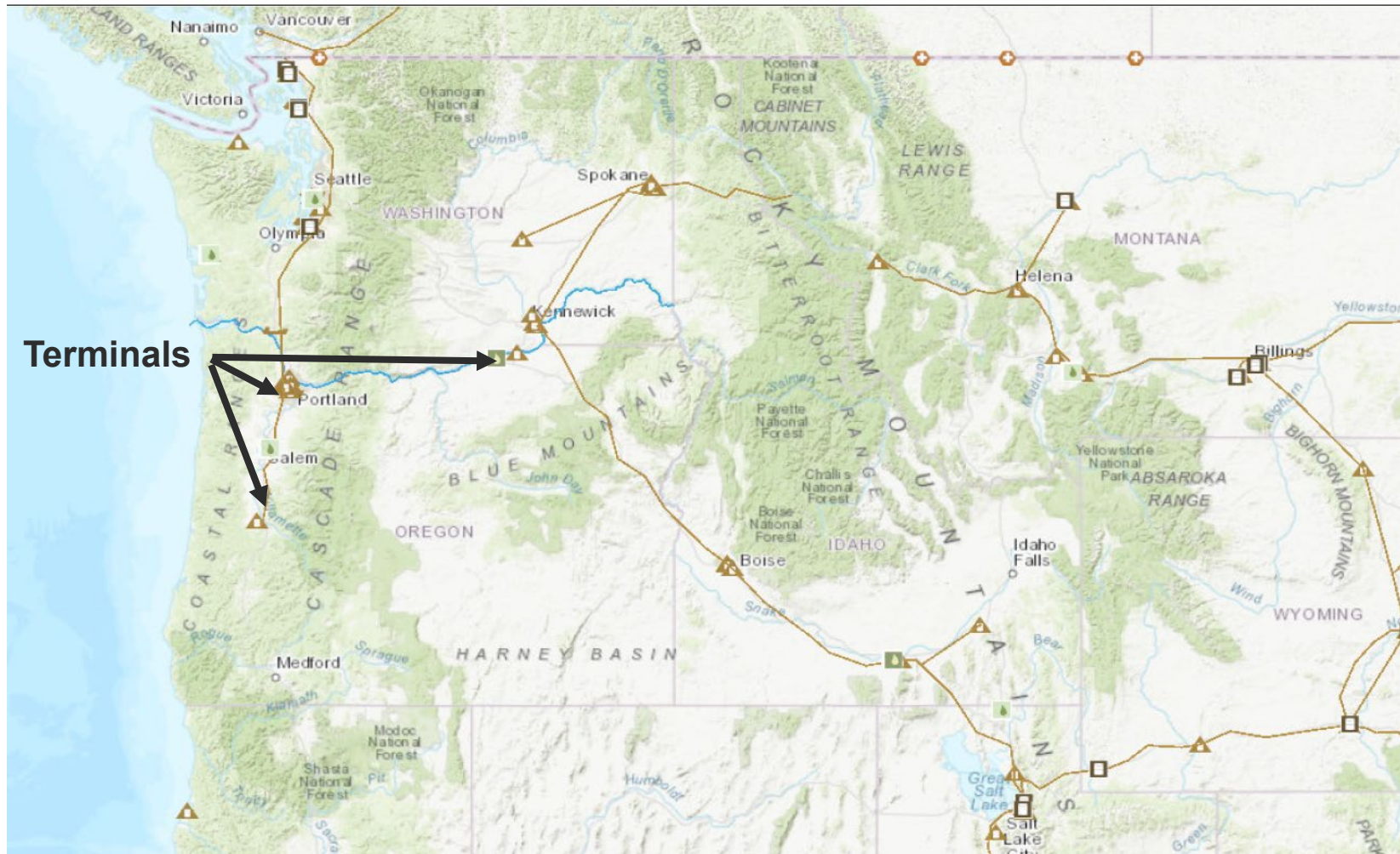
Supplemental materials

- I. Acronyms and definitions
- II. Fuel type emissions list
- III. Fuel type guidance
- IV. Winter versus summer gasoline
- V. Sample GHG report

Agenda

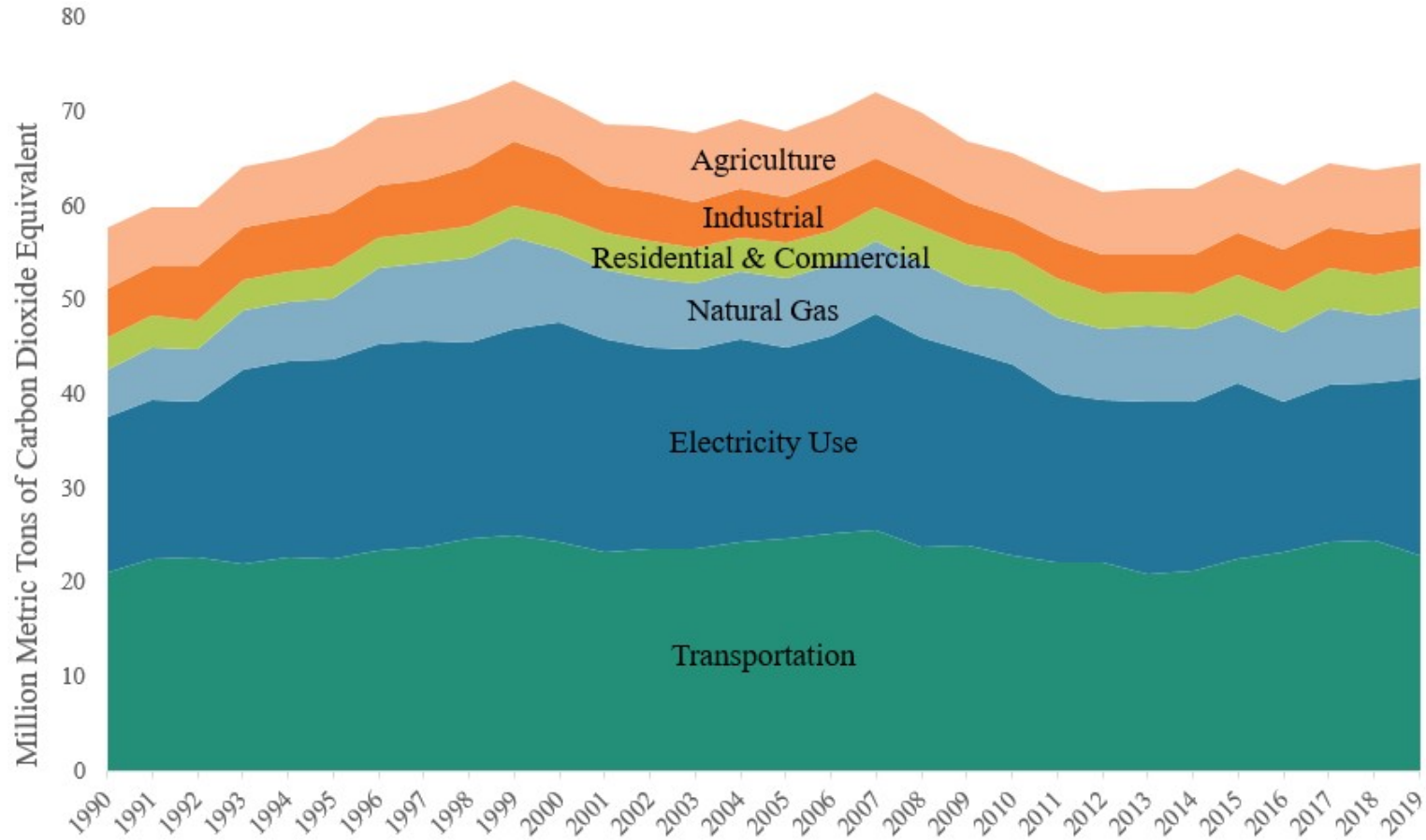
1. Sector overview
2. Fuel supplier reporting requirements
3. Links with the Clean Fuels Program
4. Verification process
5. Reporting examples

Fuel distribution



[Oregon sector based greenhouse gas inventory](#)

Oregon greenhouse gas emissions



[Oregon sector based greenhouse gas inventory](#)

Agenda

1. Sector overview
- 2. Fuel supplier reporting requirements**
3. Links with the Clean Fuels Program
4. Verification process
5. Reporting examples

Key regulatory provisions

Division 215 – Greenhouse Gas Reporting Program

- Definitions – 0020
- Applicability – 0030
- Cessation of reporting – 0034
- GHG registration and reporting – 0040
- Emissions data reports – 0044
- Recordkeeping requirements – 0042
- Requirements for fuel suppliers and in-state producers – 0110

Division 272 – Third Party Verification

- 0120 – GHG RP requirements for verification

Reporting deadline

- Deadline for GHG reporting to DEQ is **April 30**.
- Verification statements must be submitted to DEQ by **August 31**.

Fuel supplier reporting

Applicability

- Applies to all fossil and biomass-derived fuel types
- Applies to any person who:
 1. Is subject to the Oregon motor vehicle and aircraft fuel dealer tax
 2. Is subject to the Oregon use fuel tax, **OR**
 3. Produces, imports, sells, or distributes at least 5,500 **gallons** of gasoline, distillate fuel oil, biofuels, or aircraft fuel (or 10,500 **gallons** of propane) in a year.

Regulated fuels

Greenhouse Gas Reporting Fuel Types

Gasoline - Conventional		Liquefied Petroleum Gases	
	Summer regular		Propane
	Summer midgrade		Butane
	Summer premium		Butylene
	Winter regular		Ethane
	Winter midgrade		Ethylene
	Winter premium		Heavy Gas Oils
Gasoline - Reformulated?			Isobutane
	Summer regular		Isobutylene
	Summer midgrade	Aviation Fuel	
	Summer premium		Kerosene-type jet fuel
	Winter regular		Aviation gasoline
	Winter midgrade	Renewable Fuel	
	Winter premium		Ethanol
Distillate Fuel Oils			Biodiesel
	Distillate fuel oil no. 1		Renewable diesel
	Distillate fuel oil no. 2		
	Distillate fuel oil no. 4		
	Residual fuel oil no. 5 (Navy special)		

See handout II for full list of regulated fuels and emission factors.

Regulated fuels

Gasoline

- CBOB (Conventional blendstock for oxygenate blending)
- Small amounts reformulated gasoline (RBOB) usually reported, due to proximity of California market. Not required in Oregon.
- Gasoline sold either alone or as E10 (90% gasoline and 10% ethanol)

Regulated fuels

Diesel

- Mostly distillate #2, but also distillate #1 (better cold weather) and #4 reported by smaller number of companies
- Reporting includes both undyed (on-road) and dyed (off-road)
- May be sold as pure diesel, B5, or B20 (5% and 20% biodiesel)

Regulated fuels

Biomass-derived fuels

- Biodiesel sold as pure blendstock (>99% biodiesel, may have < 1% diesel), or as blended finished fuel (B5 or B20)
- Renewable diesel is biomass derived, but identical to regular diesel. It is substituted for diesel, and not considered a blended fuel like biodiesel
- Renewable diesel still reported separately from fossil diesel

Regulated fuels

Liquefied petroleum gases

- Mixture of natural gas liquids, predominantly propane and butane
- If the composition of supplied LPG is known, company can report the individual fuel types in the mixture, or use the general “LPG” fuel type for reporting
- If composition is unknown, company must use the general “LPG” fuel type for reporting

Regulated fuels

Aviation fuels

- Aviation gasoline used in piston engines
- Kerosene-type jet fuel used for turbine engines
- Kerosene-type jet fuel used in much larger volumes

Fuel supplier reporting

Applicability

- To reduce duplicative reporting and compliance costs, DEQ only requires reporting from two categories of supplier:

- 1. Position Holders:** Company that disburses fuel from a *terminal*

Terminal: Large fuel storage and distribution facility, generally supplied by a pipeline, rail, or vessel.

Oregon fuel terminals

Name	Address	City
Aircraft Service International, Inc	8133 NE Airtrans Way	Portland
Chevron USA, Inc.	5924 NW Front Ave	Portland
Kinder Morgan Liquid Terminals, LLC	5880 NW St Helens Rd	Portland
McCall Oil and Chemical Corp.	5480 NW Front Ave.	Portland
Olympic Pipeline Company	9420 NW St Helens Rd. P	Portland
Phillips 66 PL	5528 NW Doane	Portland
SFPP, LP	1765 Prairie Rd.	Eugene
Seaport Midstream Partners, LLC	9930 NW St Helens Rd.	Portland
Shore Terminals LLC	9420 NW St Helens Rd. P	Portland
Shell Oil Products US	3800 NW St Helens Rd.	Portland
Tidewater Terminal	535 Port Ave	Umatilla
Zenith Energy Holdings	5501 NW Front Ave.	Portland

Data from Oregon Department of Transportation

Fuel supplier reporting

Applicability

- To reduce duplicative reporting and compliance costs, DEQ only requires reporting from two categories of supplier:
 2. **Fuel Importers:** Company that imports fuels from outside Oregon.
 - Only applies to fuels that do not go to a terminal in Oregon
 - Most often applies to fuel imported by truck

Data to report

Fuel quantity

- Required to report emissions that would result from complete combustion or oxidation of **all** fuels supplied within Oregon
- Reported by individual fuel type (no E10 → gasoline + ethanol)
- Position holder and importer gallons reported separately

Emissions

- Emissions quantified using methodology in 40 C.F.R. part 98, subpart MM for CO₂ emissions and subpart C for CH₄ and N₂O emissions

Emission calculation

$$\text{CO}_2 = \text{Fuel} * \text{EF (Equation MM-1)}$$

CO₂ = CO₂ emissions that would result from the complete combustion or oxidation of the total volume of the specified fuel type supplied during the reporting year

Fuel = Volume of fuel type reported during the reporting year (gallons)

EF = CO₂ emission factor for the specified fuel type (MT CO₂ per gallon)

Emission calculation

$$\text{CH}_4 \text{ or N}_2\text{O} = 1 \times 10^{-3} * \text{Fuel} * \text{HHV} * \text{EF (Eq. C-8)}$$

CH₄ or N₂O = Annual CH₄ or N₂O emissions that would result from complete combustion of the total volume of the specified fuel type supplied during the reporting year. Convert to CO₂e using global warming potential from Table A-1 (40 C.F.R. part 98, subpart A)

Fuel = Volume of fuel type reported during the reporting year (gallons)

HHV = Higher heating value of specified fuel (MMBtu per gallon)

EF = Emission factor of the delivered fuel (kg CH₄ or N₂O per MMBtu)

3PV applicability

- 3PV required for all fuel suppliers who report anthropogenic emissions of at least 25,000 MT CO₂e
- No exempt fuel types or uses
- **Result** → Approximately 40 fuel suppliers are expected to require verification services for their greenhouse gas annual reports

Agenda

1. Sector overview
2. Fuel supplier reporting requirements
- 3. Links with the Clean Fuels Program**
4. Verification process
5. Reporting examples

Links with Clean Fuels Program

- The greenhouse gas reporting program and clean fuels program are distinct programs with separate reporting requirements
- The goal of the greenhouse gas reporting program is to track the total greenhouse gas emissions in Oregon
- The goal of the clean fuels program is to lower the carbon intensity of transportation fuels used in Oregon over time
- Many companies will be subject to regulation under both programs and use the same underlying data to complete both reports, but the reporting for each program is independently submitted and verified

Links with Clean Fuels Program

Criteria	Greenhouse Gas Reporting Program	Clean Fuels Program
Reporting Threshold	5,500 gallons (Gasoline, diesel, aviation fuels, renewable fuels) 10,500 gallons (propane only)	500,000 gallons
Verification Threshold	≥ 25,000 MT CO ₂ e	> 6,000 credits and deficits
Fuels to Report	All fuel uses	Transportation fuels

- Both programs use the same reporting system (OFRS)
- Greenhouse gas annual report aggregates data from CFP quarterly reports

Clean Fuels Program regulation: OAR 340-253

Links with Clean Fuels Program

2 points of regulation in GHGRP

1. Position holders
2. Fuel importers

These match 2 transaction types from CFP quarterly reports

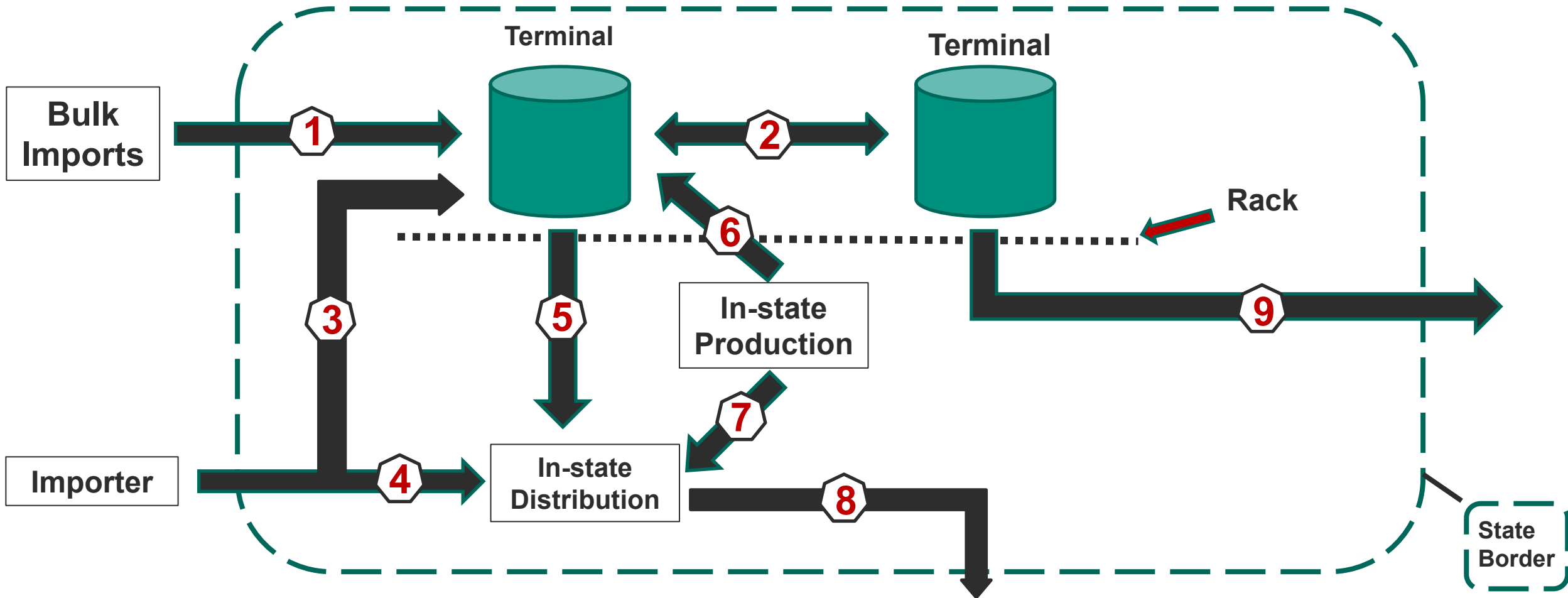
1. “Position holder sale without obligation”
2. “Import outside of the bulk system”

Links with Clean Fuels Program

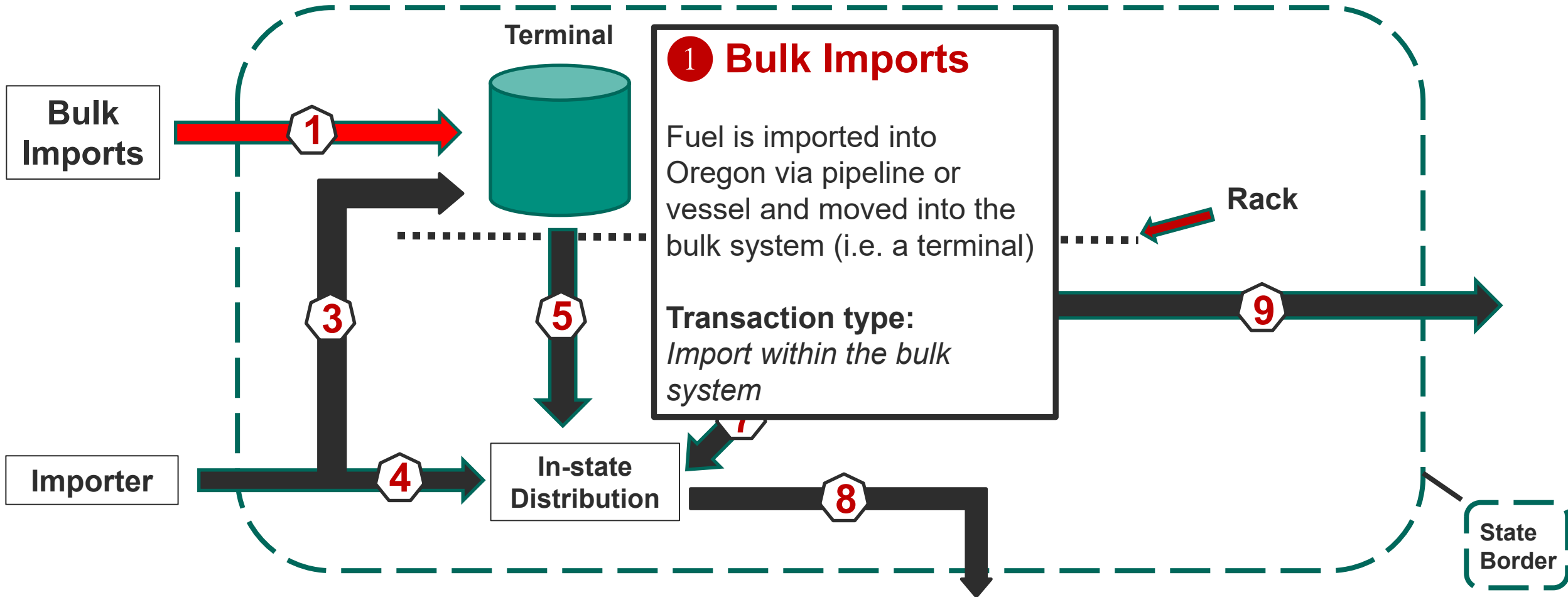
- Volumes of CFP regulated fuels reported under these transactions in CFP quarterly reports are automatically aggregated into the GHG annual report, broken out by supplier type (Position holder or fuel importer) and fuel type
- Aggregated fossil fuels are carried over as “gasoline type unknown” or “diesel type unknown”
- Companies **may** specify volumes for gasoline and diesel types, or leave as unknown type
- Additional fuels not reported within CFP quarterly reports will not be carried over and must be added to ensure complete reporting

See Handout V for sample report.

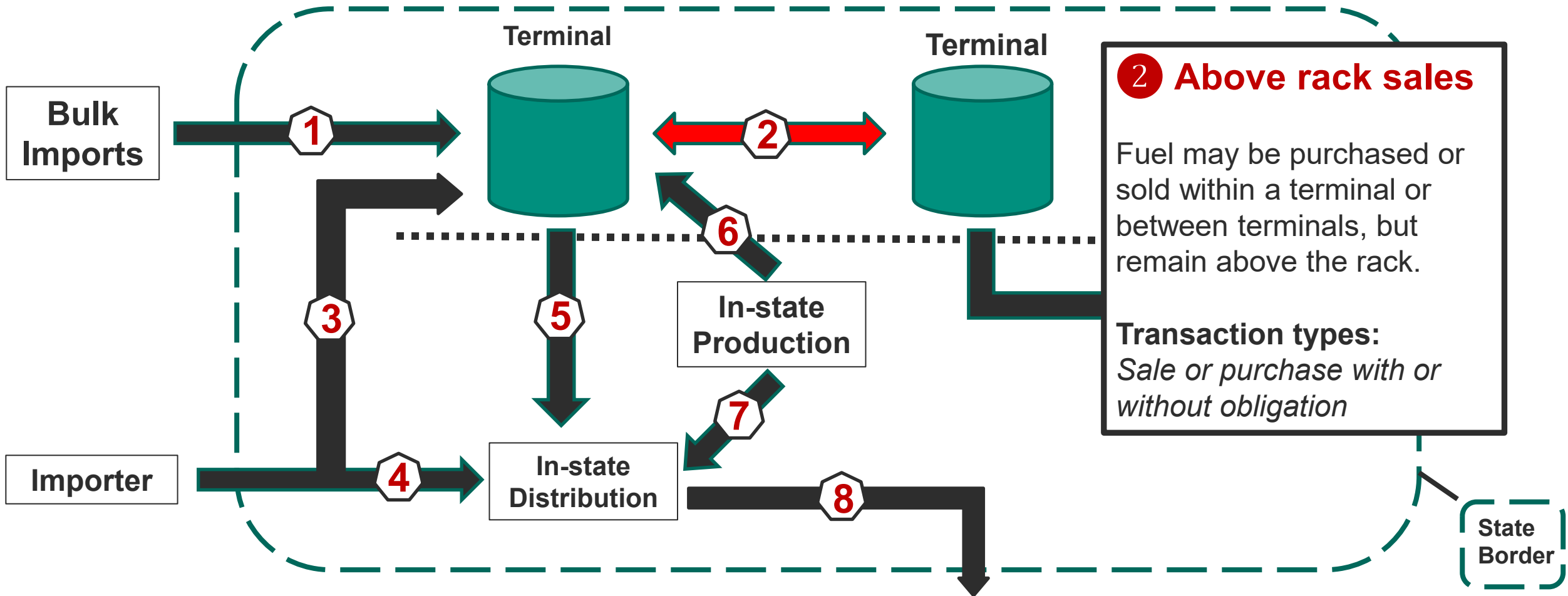
Fuel distribution transactions



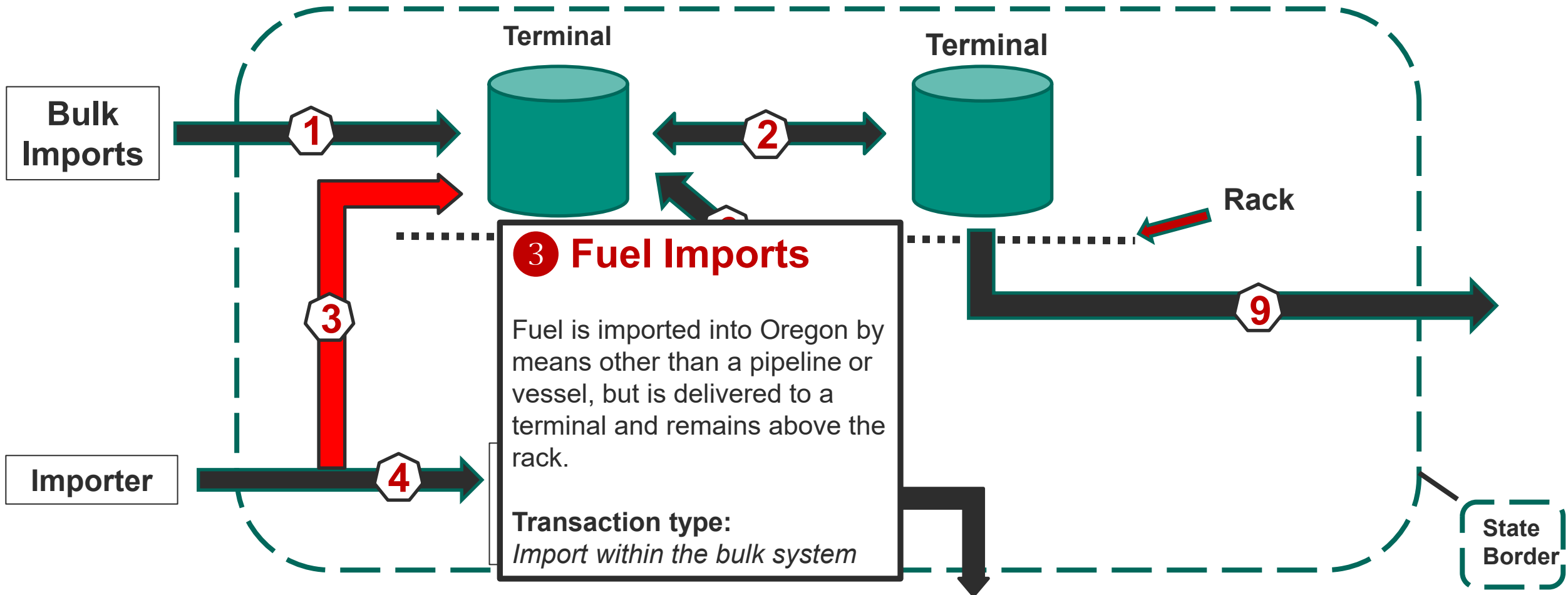
Fuel distribution transactions



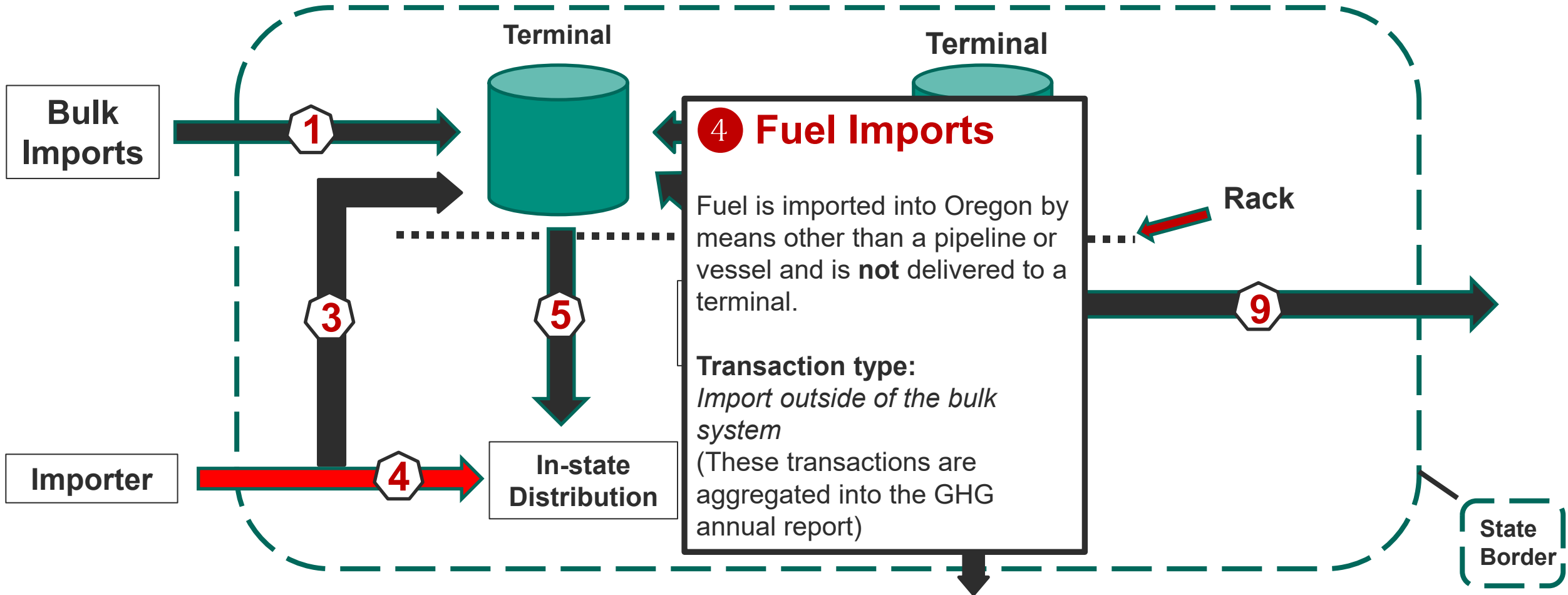
Fuel distribution transactions



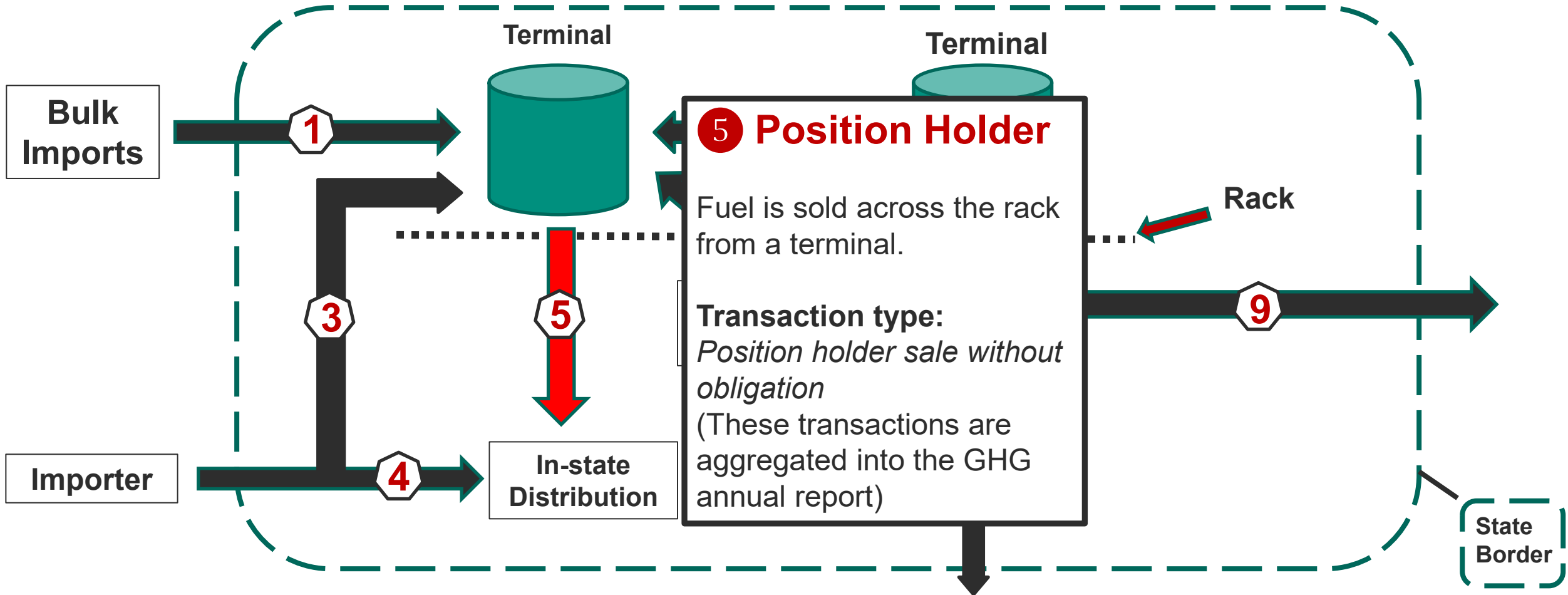
Fuel distribution transactions



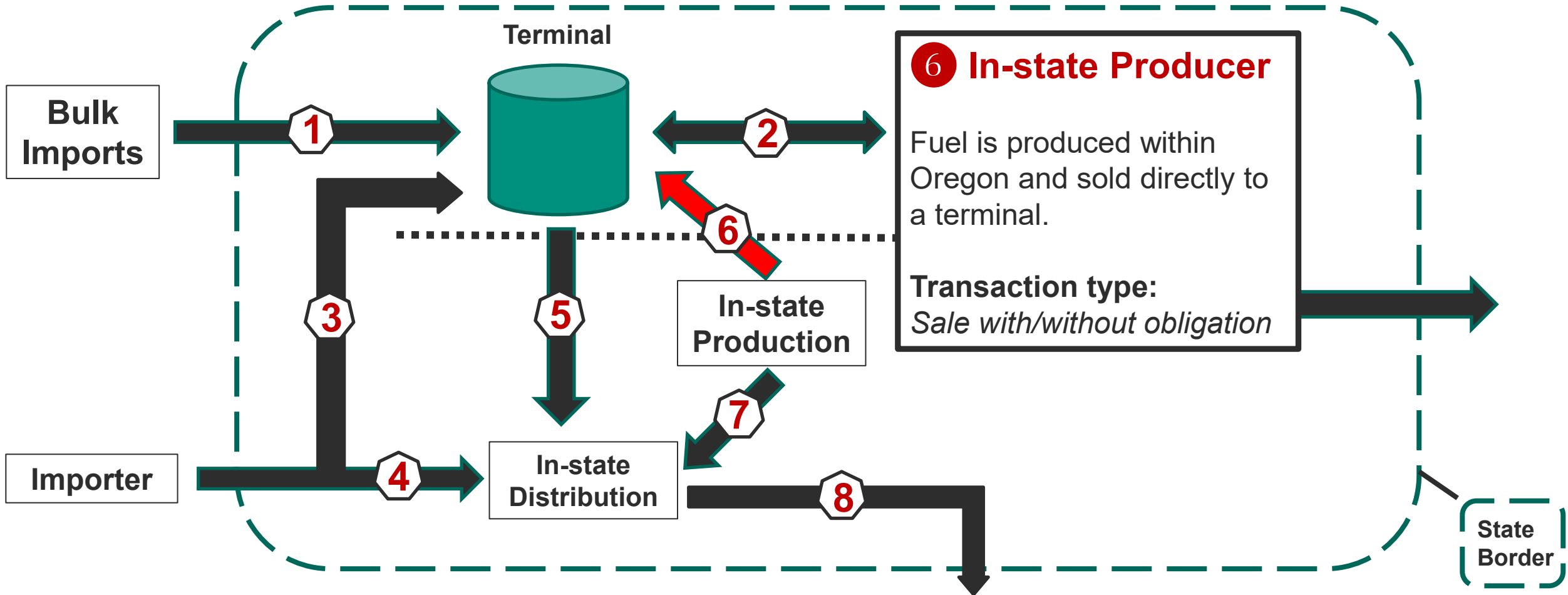
Fuel distribution transactions



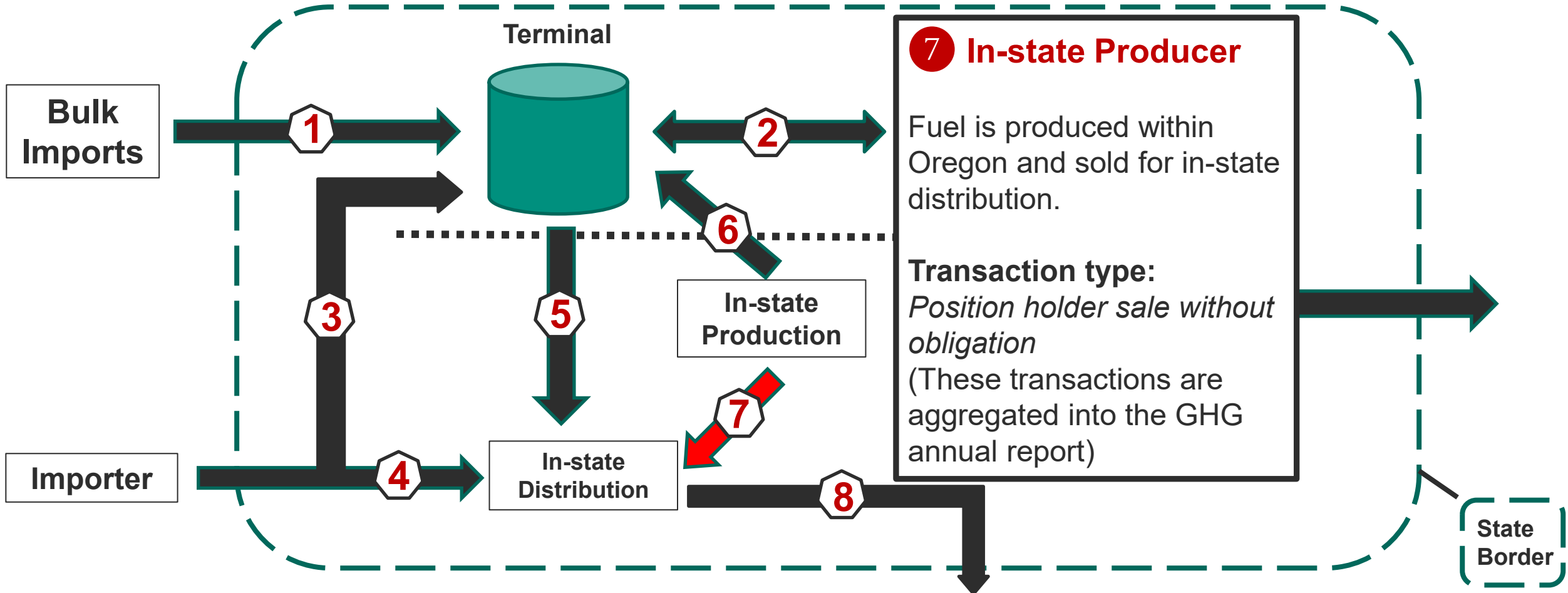
Fuel distribution transactions



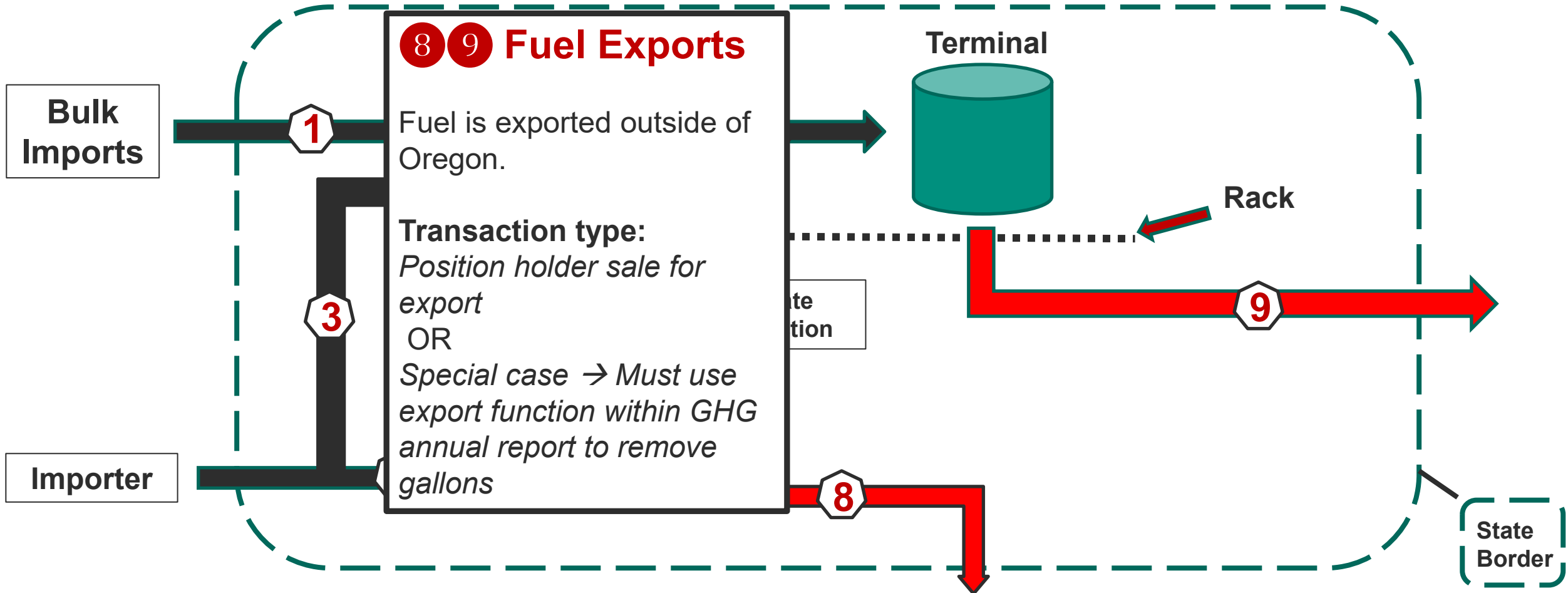
Fuel distribution transactions



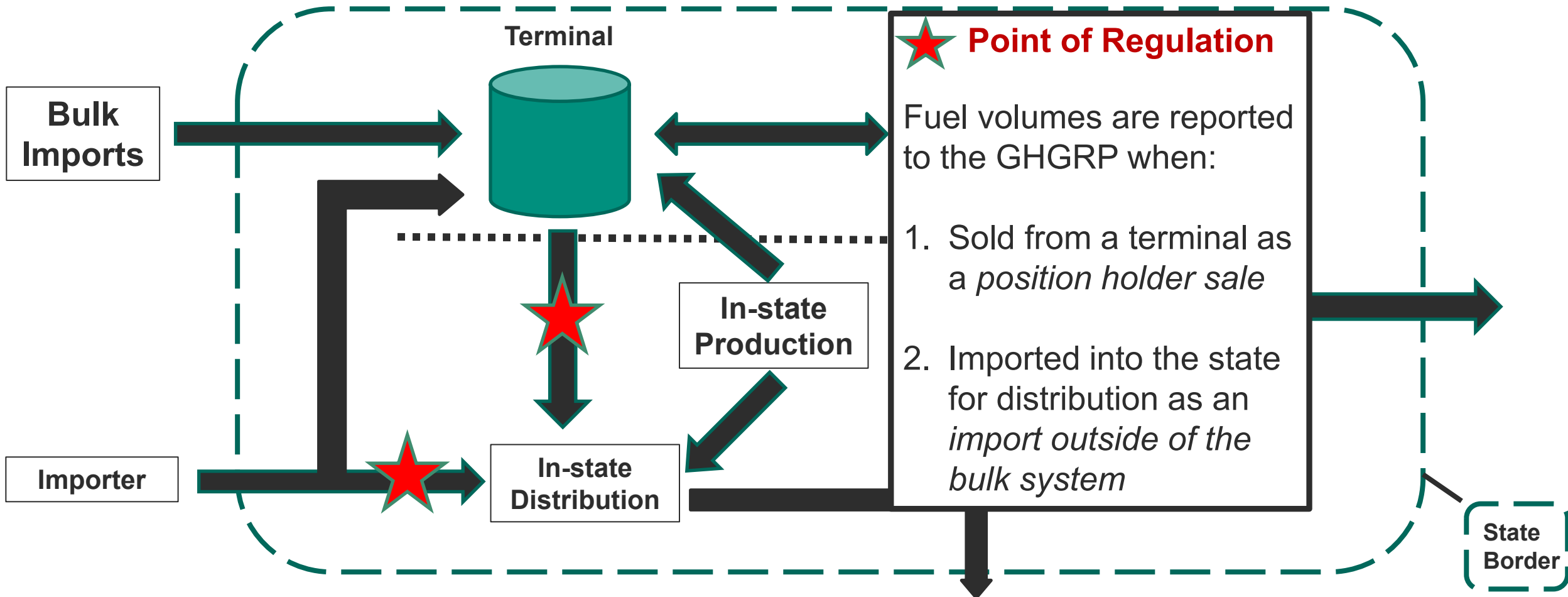
Fuel distribution transactions



Fuel distribution transactions



Greenhouse Gas Points of Regulation



Agenda

1. Sector overview
2. Fuel supplier reporting requirements
3. Links with the Clean Fuels Program
- 4. Verification process**
5. Reporting examples

Verification process

Verify the records used for all data reported to DEQ, including but not limited to:

- Product transfer documents (Bills of lading, invoices, contracts, or other chain of custody documentation)
- Financial transactions
- Records on conformance with measurement accuracy requirements
- Volume data (Corrected for temperature? Correct units? - gallons, **not barrels**)

Verification process

- Verify that all types of activities and fuel types are included in reporting
- If company is also reporting to CFP, verify that:
 - Correct transaction types used for each sale and purchase
 - GHG reporting includes all supplied fuel types, not just CFP regulated fuels

Verification process

Material misstatement

- Any combination of discrepancy, omission, or misreporting that leads you to believe there is a greater than 5% error in **total** emissions
- Not based on individual fuel types
- If corrected prior to completion of verification services, the report can receive a positive or qualified positive verification statement

Agenda

1. Sector overview
2. Fuel supplier reporting requirements
3. Links with the Clean Fuels Program
4. Verification process
- 5. Reporting examples**

Example 1 – Fuel type reporting

A fuel supplier regulated under both the CFP and GHGRP has the data in the top right table aggregated from their CFP quarterly reports and submits the data as aggregated as their GHG report, without changes.

E10 Gasoline Fuel type	Fuel Amount (gal)
Conventional summer regular	4,000
Conventional winter premium	3,000
Conventional winter regular	4,000

Fuel Importer (Gasoline)		
Fuel type	Fuel Amount (gal)	
Gasoline formulation unknown	10,000	
Other Fuels		
Supplier Type	Fuel Name	Fuel Amount (Gal)
Fuel Importer	Ethanol	1,000

While reviewing their records, you find that they supplied the specific gasoline types listed in the bottom left table.

Is this an error? If so, is it a material misstatement or a nonconformance?

- Assume all volumes are accurate

Example 1 – Solution

Although DEQ encourages companies to specify gasoline and diesel types in their reporting, this is not required by our regulations. Therefore, this is neither a nonconformance with the rule or material misstatement. The data is correct as reported and can be given a positive verification statement.

Example 2 – Flash Sale

Company A imports gasoline and holds it in their terminal storage. Company B, who does not hold position at the terminal, purchases 1000 gallons of gasoline from Company A while the fuel is in the terminal and then immediately sells the fuel to Company C, a jobber who is picking up at the rack.

Which company must report these gallons to the GHGRP?

- A) Company A
- B) Company B
- C) Company C

Example 2 – Solution

Company A imports gasoline and holds it in their terminal storage. Company B, who does not hold position at the terminal, purchases 1000 gallons of gasoline from Company A while the fuel is in the terminal and then immediately sells the fuel to Company C, a jobber who is picking up at the rack.

Which company must report these gallons to the GHGRP?

A) Company A

B) Company B →

Company B conducted a flash sale. Even though they only owned the fuel momentarily as it was transferred across the rack, they were the final owner above the rack and must report these gallons to GHGRP as a position holder.

C) Company C

This concludes this presentation

For questions, please
contact us:

3PVerify@deq.state.or.us

Thank you for attending!