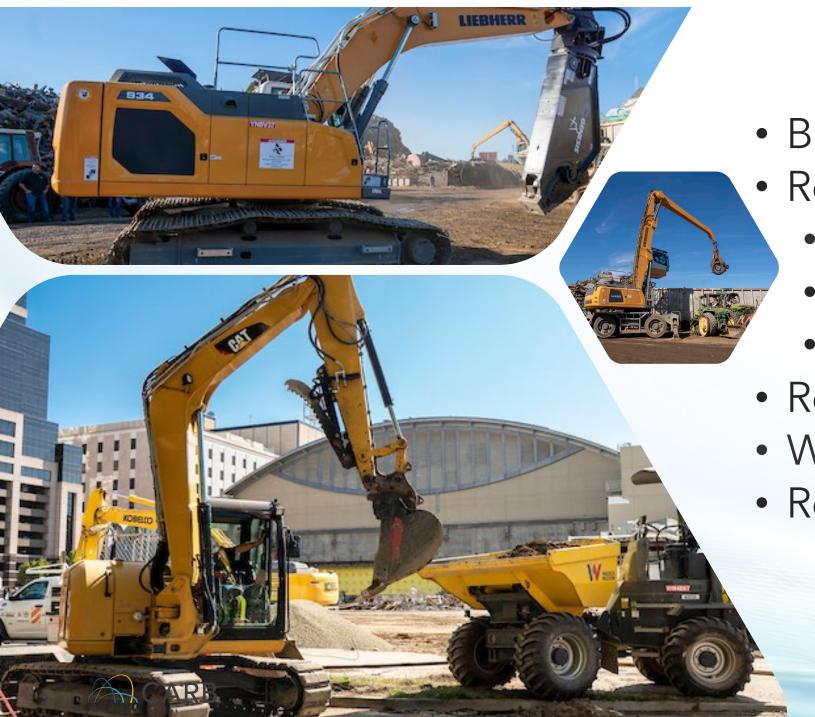


## In-Use Off-Road Diesel-Fueled Fleets Regulation Renewable Diesel

Overview of 2022 Amendments
November 8, 2023
Eloy Florez



### **Outline**

Background

• Renewable Diesel (RD)

• What is RD

• Requirements

Exemptions

Rental Equipment

Where to Buy RD

Resources

## **Regulation Background**

#### Overview

- First took effect in 2008
- Applicability:
  - Vehicles with diesel engines 25 horsepower and up<sup>1</sup>
  - Construction, mining, industrial equipment, and others
  - Some two-engine on-road vehicles and workover rigs
- Declining fleet average emissions targets
- Ban on adding Tier 0 Tier 2 vehicles
- Report and label all vehicles
- Idling limits

<sup>1</sup>Excludes equipment such as agricultural use, dedicated snow removal, and emergency vehicles.





### What is Renewable Diesel (RD)?

Made of nonpetroleum renewable resources such as natural fats, vegetable oils, and greases

"Drop in" fuel that meets ASTM D975 standards for diesel fuel

No changes to engine, transport, storage, and fueling infrastructure

NOx and PM emission reductions

Use of renewable diesel will NOT impact your vehicles' warranty



### **Renewable Diesel Benefits**

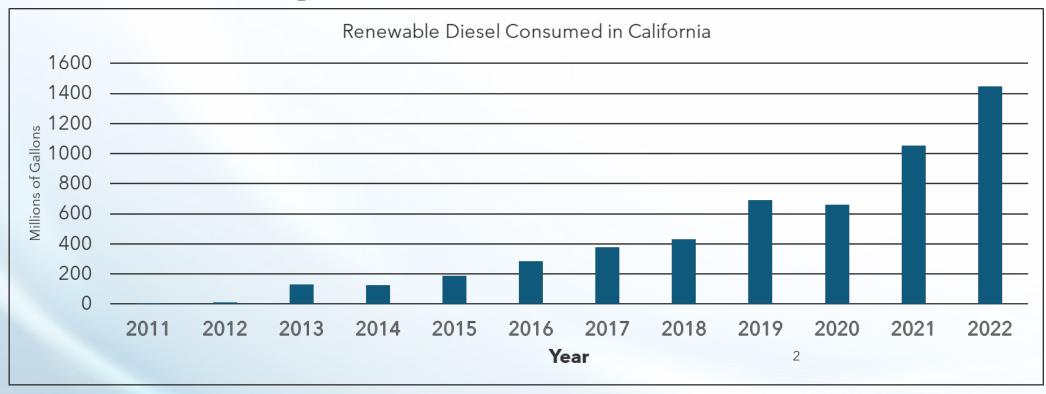
Emissions	R99 Fuel
NOx	-10%
Diesel PM	-30%

#### Reductions above are:

- Relative to CARB Ultra Low Sulfur Diesel (ULSD)
- For Heavy-duty engines without SCR and DPF controls (Tier 4i and older engines)



## Renewable Diesel for On- and Off-Road Transportation Use in California



Total from 2011-2020 = 2.59 billion gallons Total from 2021 and 2022 = 2.34 billion gallons



## Renewable Diesel Requirements

#### The 2022 Amendments require fleets to procure and use Renewable Diesel

- Fleets must attest they are compliant and keep records that demonstrate compliance
- Recordkeeping
  - Dates and volumes of fuel purchased
  - Maintain records for three calendar years

Limited and targeted exemptions





# Renewable Diesel Usage: Exemption if Unable to Procure

### Requirements

If unable to procure renewable diesel fleets may use CARB diesel with the following using requirements:

- Keep records
  - Normal description of normal fueling methods;
  - Documented attempts to procure RD; and
  - Documentation showing inability to procure RD
    - Correspondence, Contractor bids





## Renewable Diesel Usage Cold Weather Exemptions Winter Low Exemption

### Winter low temperature

Any fleet, fleet portion or vehicle that is located or operated in a location where the 10<sup>th</sup> percentile minimum ambient air low temperature in January < 20° (Fahrenheit) is exempt from the RD requirements

- Fleet owners must report to CARB by April 30 of the year
- Reports must include the fleet, fleet portion, or vehicle location
- The tenth percentile low temperature used

Volume of renewable diesel and conventional diesel procured during October through February



## Renewable Diesel Usage Cold Weather Exemptions Intermittent low temperature

### Intermittent low temperature

Any fleet, fleet portion or vehicle operating in a location where the temperature drops or is expected to drop below 20° (Fahrenheit) is exempt from the RD requirements with the following requirements:

- Report to CARB within two weeks of the last exemption date.
- · Include each day conventional diesel was used
- The fleet location,
- High and low temperature for each day exemption is used
  - · A printout or screenshot for each day the exemption is used
- Provide the date and source of the temperature record.

Report volume of CARB diesel and RD used during exemption period



## Renewable Diesel Usage: Exemptions for Attainment and Clean Technology

### Any Fleet or Fleet Portion

- Designated captive attainment area fleets or vehicles while operating in a county listed as a captive attainment area.
- 100% Tier 4 final, MY 2010 or newer on-road engines, or zero-emission.



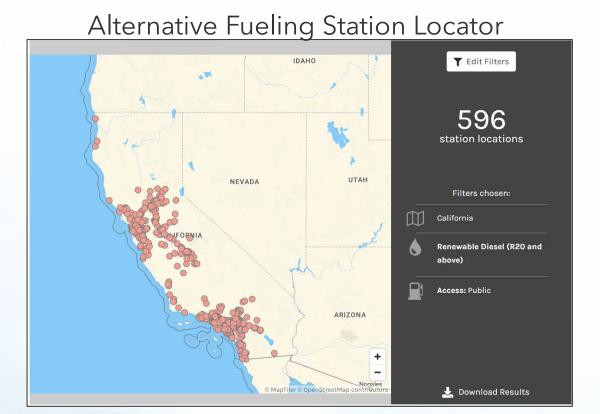
### **Renewable Diesel in Rental Fleets**

- Contract language for Renewable Diesel compliance required
- Contract language offers protection to rental fleet
- No fuel tank draining requirements
- Rental fleet must disclose renter's information upon request by CARB



## Where to Buy Renewable Diesel

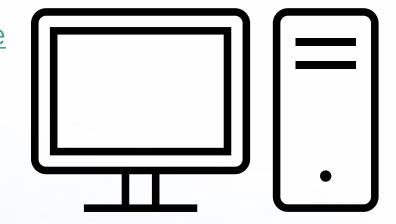
- Request R99/R100 from fuel provider
- Retail gas stations
  - Alternative Fuels Data Center:
     Alternative Fueling Station Locator
     (energy.gov)
- Labeled as Renewable Diesel
  - Not renewable biodiesel, B20 etc
- Red dye R99 and clear R99 meet the regulation's RD requirements
  - Red dye for tax purposes only





### Contact, Information, and Assistance

- Off-Road Regulation Homepage: www.arb.ca.gov/ordiesel
- Off-Road Regulation Text:
   https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-roaddiesel/froa-1.pdf
- Off-Road Zone
   https://ww2.arb.ca.gov/ourwork/programs/truckstop-resources/road-zone



 DOORS Hotline and E-mail (877) 593-6677 doors@arb.ca.gov



## **Next Informational Meeting Dates**

Session #4

Off-Road Regulation Contracting Requirements

DATE: Tuesday, December 5, 2023

TIME: 1:00 PM. to 3:00 PM.



### **Questions and Discussion**

