

# PORTSIDE ENVIRONMENTAL JUSTICE NEIGHBORHOODS COMMUNITY STEERING COMMITTEE

HANDOUT – APRIL 23, 2019

## EXISTING STATEWIDE REGULATIONS AND CONTROL MEASURES

### PORT RELATED REGULATIONS

#### **Commercial Harbor Craft Regulation**

CARB's existing Commercial Harbor Craft regulation was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen, and Reactive Organic Gases from diesel engines used on Commercial Harbor Craft operating at ports, such as ferries, dredges, and barges.

<https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft>

#### **Cargo Handling Equipment Regulation**

CARB's Cargo Handling Equipment Regulation establishes requirements for in-use and newly purchased diesel-powered equipment at ports and intermodal rail yards, such as yard trucks, rubber-tired gantry cranes, container handlers, forklifts and other types of equipment.

<https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment>

#### **At-Berth Regulation (Shore Power)**

CARB's At-Berth Regulation (Shore Power) was adopted to reduce emissions of diesel particulate matter and oxides of nitrogen from diesel auxiliary engines on container ships, passenger ships, and refrigerated-cargo ships while berthing at a California Port.

<https://www.arb.ca.gov/ports/shorepower/shorepower.htm>

#### **Ocean-Going Vessel Fuel Regulation**

The existing California Ocean-Going Vessel Fuel Regulation requires the use of cleaner marine distillate fuels in ocean-going vessels that visit California seaports to reduce particulate matter, oxides of nitrogen, and sulfur oxide emissions from ocean-going vessels.

<https://www.arb.ca.gov/ports/marinevess/ogv.htm>

### FUEL REGULATIONS

#### **Low Carbon Fuel Standard**

The Low Carbon Fuel Standard sets annual carbon intensity standards, which reduce over time, for gasoline, diesel, and the fuels that replace them.

<https://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

#### **Diesel Fuel Regulations**

The California diesel fuel program set stringent standards for California diesel that produced cost-effective emission reductions from diesel-powered vehicles.

<https://www.arb.ca.gov/fuels/diesel/diesel.htm>

## ON-ROAD MOBILE SOURCE REGULATIONS

Please see the attached Multi-Regulation Summary

<https://www.arb.ca.gov/msprog/onrdiesel/documents/multirule.pdf>

## OFF-ROAD MOBILE SOURCE REGULATIONS

### Transport Refrigeration Unit Regulation

Please see the attached Multi-Regulation Summary

<https://www.arb.ca.gov/msprog/onrdiesel/documents/multirule.pdf>

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

The Off-Road Diesel Regulation sets out to reduce emissions of diesel particulate matter and oxides of nitrogen from in-use off-road heavy-duty diesel vehicles by imposing idling limits, restrictions on older vehicles added to fleets, and requiring fleets to reduce their emissions. Such vehicles are used in construction, mining, and industrial operations.

<https://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

### Small Off-Road Engine Regulation

The Small Off-Road Engine Regulation adopted emissions standards for small spark-ignition engines rated at or below 19 kilowatts. Engines in this category are primarily used for lawn, garden, and other outdoor power equipment.

<https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore>

## TOXIC AIR CONTAMINANT CONTROL PROGRAM

### Chrome Plating Control Measure

The Chrome Plating Airborne Toxic Control Measure requires chrome plating facilities to reduce their emissions by requiring the use of chemical fume suppressants and/or add-on controls to meet stringent hexavalent chromium emission limits.

<https://www.arb.ca.gov/toxics/chrome/chrome.htm>

### Composite Wood Control Measure

The Composite Wood Airborne Toxic Control Measure was adopted to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, thin medium density fiberboard, and finished goods (e.g. floorings, cabinets and furniture) made with composite wood products.

<https://www.arb.ca.gov/toxics/compwood/compwood.htm>

# Multi-Regulation Summary (MRS)

## Requirements for Diesel Truck and Equipment Owners

All owners of diesel trucks, buses, trailers and transport refrigeration units, or “reefers,” that operate in California, are required to take steps to reduce air pollution. Reducing emissions from existing equipment is necessary to meet federally imposed clean air standards and to reduce the adverse health effects from pollution. Funding opportunities may also be available to lower emissions earlier than required. This document summarizes requirements and key dates for upgrading existing equipment:

### 1. LEGACY PROGRAMS

- A) Idling Limits** - restrict diesel vehicles from idling more than five minutes, and idling in school zones is not allowed with limited exceptions.  
See: [www.arb.ca.gov/noidle](http://www.arb.ca.gov/noidle)
- B) The Heavy-Duty Vehicle Inspection Program** uses random roadside inspections to verify that diesel engines do not smoke excessively and are tamper free.  
See: [www.arb.ca.gov/enf/hdvip/hdvip.htm](http://www.arb.ca.gov/enf/hdvip/hdvip.htm)
- C) Emission Control Labels** must be affixed to engines of all commercial heavy-duty diesel vehicles, and must be legible as proof the engine, at minimum, meets U.S. federal emissions standards for the engine model year.
- D) The Periodic Smoke Inspection Program** requires owners of California based fleets of two or more diesel vehicles to perform annual smoke opacity tests and to keep records for at least two years for each vehicle. The requirement does not apply to cars or trucks that must undergo a Smog Check.

### 2. TRUCKS AND BUSES (Private & Federal Fleets)



Diesel trucks and buses with a GVWR that is 14,001+ lbs. must reduce exhaust emissions by meeting particulate matter (PM) filter requirements and upgrading to 2010 model year (MY) or newer engines.

**HEAVIER VEHICLES** with a GVWR of 26,001+ lbs. need upgrades as shown in the table. No reporting is required if using the heavier vehicle schedule.

Schedule for Heavier Trucks and Buses		
Engine Year	PM Filter*	2010 MY Engine
Pre-1994	Not required	January 1, 2015
1994-1995	Not required	January 1, 2016
1996-1999	January 1, 2012	January 1, 2020
2000-2004	January 1, 2013	January 1, 2021
2005 or newer	January 1, 2014	January 1, 2022
2007-2009	If already equipped	January 1, 2023

\* 50% PM reduction can be used if 85% reduction is not available.

**LIGHTER VEHICLES** with a GVWR between 14,001 and 26,000 lbs. need to be upgraded to 2010 or newer MY engines. Check the table to determine your schedule. No retrofit PM filter or reporting is required for lighter vehicles.

Schedule for Lighter Trucks and Buses	
Engine Year	2010 MY Engine
1995 and older	January 1, 2015
1996	January 1, 2016
1997	January 1, 2017
1998	January 1, 2018
1999	January 1, 2019
2003 and older	January 1, 2020
2004-2006	January 1, 2021
2007-2009	January 1, 2023

On April 24-25, 2014, the California Air Resources Board held a meeting to consider the proposed amendments to the Truck and Bus Regulation. ARB has approved these changes to assist fleets with the transition to cleaner vehicles while preserving overall emission reductions and health benefits of the Regulation. There are new options that may allow additional compliance flexibility for your vehicles. For more information, please see the approved amendments page at: [www.arb.ca.gov/msprog/truckstop/tb/approved.htm](http://www.arb.ca.gov/msprog/truckstop/tb/approved.htm).

### 3. DRAYAGE TRUCKS



Diesel-fueled trucks transporting cargo destined to or coming from California’s ports and intermodal rail yards (including bobtails and transporting chassis) must be registered in the statewide Drayage Truck Registry prior to entry. Drayage fleets must comply with requirements by operating only vehicles with 2007 MY engines or newer.

By January 1, 2023, all class 7 and 8 diesel-fueled drayage trucks must have 2010 and newer engines. Trucks with 2010 and newer engines are fully compliant with both the Truck and Bus and Drayage regulations. The exchange of marine or rail cargo (e.g. containers) between compliant and non-compliant drayage trucks is not allowed anywhere in California.

Truck Engine Model Year	Emission Requirements
<b>Compliance Schedule (GVWR 26,001 lbs. or more)</b>	
2006 and older	Not allowed
2007-2009	Compliant through 2022
2010 and newer	Fully compliant

Drayage Truck Regulation  
1-888-247-4821  
[www.arb.ca.gov/drayagetruck](http://www.arb.ca.gov/drayagetruck)

#### 4. TRACTORS AND BOX-TYPE TRAILERS

The Tractor-Trailer Greenhouse Gas regulation applies to 53-foot or longer box-type trailers and 2013 MY or older heavy-duty tractors that pull these trailers.

##### Low-Rolling Resistance Tire Requirements\*

	Required Older	2010 MY and 2011 MY to 2013 MY	2014 MY and newer
<b>Tractors</b>	Required	Required	N/A
<b>Trailers</b>	1/1/2017	Required	Required

##### Tractor Requirements

All 2011 through 2013 MY sleeper-cab tractors must be SmartWay designated models. 2014 MY or newer tractors are covered by a federal regulation and are exempt from this rule.

For more information, please see: [www.arb.ca.gov/tractortrailer\\_ghg](http://www.arb.ca.gov/tractortrailer_ghg)

\*Must be SmartWay certified

##### Trailer Aerodynamic Requirements

All trailers must be either SmartWay certified or aerodynamically retrofitted\* to a minimum standard. Fleets that previously reported trailers to use the Optional Compliance Schedules may phase-in aerodynamic technologies over several years.

##### Delays and Exemptions

Certain trucks subject to the Transportation Refrigeration Unit (TRU) rule can phase-in tire and aerodynamic requirements between 2018 to 2020. This only applies to TRUs with 2003 to 2009 MY trailers and 2003 or newer reefer engines.

Fleets must register to take advantage of short haul, local haul or storage trailer exemptions, and to apply for temporary use passes.

#### 5. TRANSPORT REFRIGERATION UNITS (TRUs or Reefers)

All transport refrigeration units (TRU) and TRU generator sets that operate in California must meet the in-use performance standards (see compliance schedule table below). Every California-based TRU and TRU generator set must be registered in ARBER and be labeled with an ARB Identification Number. All terminals that are located in California where TRU are based must submit operator reports to ARB at: [arber.arb.ca.gov/Welcome.arb](http://arber.arb.ca.gov/Welcome.arb).

Fleets may comply by using alternative technologies, installing a verified PM filter or upgrading to cleaner engines.

The business entity that hires carriers (e.g. brokers, shippers or receivers) must only use carriers that supply compliant TRUs.

Transport Refrigeration Unit Regulation  
1-888-TRU-ATCM (1-888-878-2826)  
[www.arb.ca.gov/diesel/tru/tru.htm](http://www.arb.ca.gov/diesel/tru/tru.htm)

TRU and TRU Generator Set Compliance Schedule		
Engine Model Year	Low-Emission TRU (50% PM Reduction)	Ultra-Low-Emission TRU (85% PM Reduction)
2001 or older	Original – December 31, 2008	December 31, 2015
	Delayed – December 31, 2009	December 31, 2015
2002	December 31, 2009	December 31, 2016
2003	December 31, 2010	December 31, 2017
2004 (<25 hp)	December 31, 2011	December 31, 2018
2004 (>25 hp)	Not Applicable	December 31, 2011
2005 and newer	Not Applicable	December 31 <sup>st</sup> of the model year plus 7 years

#### 6. PUBLIC FLEETS AND OTHERS

Vehicles with a GVWR of 14,001+ lbs. that are owned by state and local government fleets, publicly-owned school buses, private utilities, and solid waste collection vehicles, must be already be retrofitted with the best available ARB verified PM filters or upgraded.

Vehicle or Fleet Type	Website
Public and Private School Buses	<a href="http://www.arb.ca.gov/dieseltruck">www.arb.ca.gov/dieseltruck</a>
Solid Waste Collection Vehicles	<a href="http://www.arb.ca.gov/msprog/swcv/swcv.htm">www.arb.ca.gov/msprog/swcv/swcv.htm</a>
Public Transit Fleet Vehicles	<a href="http://www.arb.ca.gov/msprog/bus/bus.htm">www.arb.ca.gov/msprog/bus/bus.htm</a>
State and Local Government Vehicles and Private Utilities	<a href="http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm">www.arb.ca.gov/msprog/publicfleets/publicfleets.htm</a>

#### FUNDING OPPORTUNITIES

Grant funding is very limited but may be available to help fleets and individuals comply with California regulations earlier than is required. Funding is available for vehicle replacements, retrofits, or zero-emission technologies. Please contact the local air district where you are based to determine if you eligible for funding or if an opportunity may become available in the future. ARB's loan assistance program (PLACE) helps small businesses with vehicles that operate at least 50 percent time in California. The program connects truckers to participating lenders to help purchase trucks, PM filters, aerodynamic retrofits or low-rolling resistance tires. See: [http://www.arb.ca.gov/msprog/truckstop/azregs/fa\\_resources.htm](http://www.arb.ca.gov/msprog/truckstop/azregs/fa_resources.htm)

#### FOR MORE INFORMATION

Note: Each fleet may have unique requirements. This page summarizes portions of ARB's diesel vehicle regulations and should not be substituted for the actual regulatory language or requirements.

Visit [www.arb.ca.gov/truckstop](http://www.arb.ca.gov/truckstop) for more detailed information, or contact ARB's diesel hotline at 866-6DIESEL (866-634-3735), or send an email to [8666diesel@arb.ca.gov](mailto:8666diesel@arb.ca.gov).

# FUTURE STATEWIDE REGULATIONS AND CONTROL MEASURES

## PORT FOCUSED PROPOSED MEASURES

### **Ships At-Berth Amendment (Shore Power)**

<https://www.arb.ca.gov/ports/shorepower/shorepower.htm>

### **Commercial Harbor Craft Amendment**

See Blueprint page F-3

<https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft>

### **Zero Emission Cargo Handling Equipment**

See Blueprint page F-3

<https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment>

### **Zero Emission Drayage Trucks**

See Blueprint page F-4

<https://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>

## RAIL FOCUSED PROPOSED MEASURES

### **Reduced Idling at Railyards**

See Blueprint page F-5

<https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california>

### **Emissions Reductions from Non-preempted Locomotives**

See Blueprint page F-5

<https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california>

## FUEL FOCUSED PROPOSED MEASURES

### **Low Carbon Fuel Standard**

<https://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

### **Low-Emission Diesel Requirement**

<https://www.arb.ca.gov/fuels/diesel/diesel.htm>

## PROPOSED ON-ROAD MOBILE SOURCE MEASURES

### Innovative Clean Transit Regulation

<https://www.arb.ca.gov/msprog/ict/ict.htm>

### Amendments to Smoke Inspection Programs

<https://www.arb.ca.gov/msprog/hdim/hdim.htm>

<https://ww2.arb.ca.gov/rulemaking/2018/heavy-duty-vehicle-inspection-program-and-periodic-smoke-inspection-program>

### Heavy-Duty On-Board Diagnostic Regulations

<https://www.arb.ca.gov/msprog/obdprog/hdobdreg.htm>

### Advanced Clean Local Trucks

<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

### Advanced Clean Cars 2

<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>

### Heavy Duty Inspection & Maintenance

<https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program>

## PROPOSED OFF-ROAD MOBILE SOURCE MEASURES

### Zero Emission Transport Refrigeration Unit

<https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation>

### Small Off-Road Engines

<https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore>

## ADDITIONAL PROPOSED CONTROL MEASURES

### Chrome Plating Control Measure Amendments

See Blueprint page F-6

<https://www.arb.ca.gov/toxics/chrome/chrome.htm>

### Composite Wood Products Control Measure Amendments

See Blueprint page F-7

### Commercial Cooking Suggested Control Measure

See Blueprint page F-8