



# Heavy Duty Regulations and Incentives Overview

West Oakland Community Steering Committee  
April 7, 2021

# Agenda

- Review of heavy duty regulations
  - Advanced Clean Trucks
  - Advanced Clean Fleets
  - Heavy Duty Inspection and Maintenance Program
- Truck Incentives
- Open Discussion

# Advanced Clean Trucks (ACT) Approved June 2020

## Manufacturer ZEV Sales

Must sell zero-emission trucks as a percentage of annual sales

## Large Entity Reporting

One time reporting  
in April 2021

Vehicle, usage,  
and home-base  
characteristics

# ACT - Manufacturer Zero-Emission Sales

- Zero-emission vehicles as a percentage of annual sales\*
  - 300,000 by 2035
- Minimum tractor sales
- Fleets report data April 2021

## What it means for West Oakland:

More zero-emission truck options for fleets to buy

Model Year	Class 2b-3	Class 4-8	Class 7-8 Tractors
2024	5%	9%	5%
2025	7%	11%	7%
2026	10%	13%	10%
2027	15%	20%	15%
2028	20%	30%	20%
2029	25%	40%	25%
2030	30%	50%	30%
2031	35%	55%	35%
2032	40%	60%	40%
2033	45%	65%	40%
2034	50%	70%	40%
2035+	55%	75%	40%

# Proposed Advanced Clean Fleets Rule

- Transition to zero-emission trucks and buses from 2023 to 2045
  - Drayage trucks
  - Public fleets
  - High priority private and federal fleets
- Recognition for using zero-emission fleets
- Board consideration December 2021

Advanced Clean Fleets webpage: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

# Public Fleets

- Applies to cities, counties, special districts, state agencies\*
- Percent of vehicle purchases must be zero-emission
  - 50% for 2024-2026 model year
  - 100% for 2027 model year onwards



What it means for West Oakland:  
Less pollution from local government truck yards  
and maintenance activities



# Drayage Trucks Overview

- Applies to trucks entering intermodal seaports or railyards
- Beginning in 2023, any truck added to the CARB Drayage Truck Registry must be zero-emissions
- Legacy drayage service ends when engine model is 13 years old or 800,000 miles, whichever comes last (no more than 18 years)
- Complete transition to zero-emissions by 2035



**What it means for West Oakland:**  
No pollution from tractors that go to the ports  
and railyards by 2035



# Private and Federal Fleets Overview

- Applies to high priority private and Federal fleets
  - > \$50 million revenue or more than 50 trucks

Zero-Emission Fleet Percentage	10%	25%	50%	75%	100%
Box trucks, vans, two-axle buses, yard trucks	2025	2028	2031	2033	2035
Work trucks, day cab tractors, three-axle buses	2027	2030	2033	2036	2039
Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042



## What it means for West Oakland:

Less pollution from delivery, work, and garbage trucks in the neighborhoods sooner, and from all other truck types later





# Private and Federal Fleets Overview (Cont'd)

- US Postal Service – West Oakland distribution center
- Day cab semi trucks – Zero-emission transition starts in 2027
- 100% zero-emission by 2039 for day cabs semi trucks



# Heavy-Duty Vehicle Inspection and Maintenance Program

- SB 210 (Leyva; Statutes of 2019) directs CARB to develop and implement a new, comprehensive HD I/M program
  - Maintain low emissions throughout a vehicle's life
  - Ensure emissions control systems are functioning properly
- Applicable to all HD non-gasoline vehicles operating in California
  - Limited exemptions (zero emission vehicles exempt)
- Gasoline HD already in BAR's Smog Check Program



# Proposed HD I/M Program Structure

- Require periodic vehicle inspections
  - On-board diagnostic (OBD) checks for 2013+ MY engines
  - Retain smoke opacity testing for pre-2013 MY engines
- Support with roadside emissions measurement and new enforcement mechanisms
  - Compliance certificate required to operate in CA
  - Link HD I/M compliance to DMV registration
  - Enhanced field enforcement/inspections with CHP



# HD I/M Program Development Next Steps

- Multiple public workshops/workgroup meetings since 2019
- Most recent workgroup meetings in February and March 2021 to discuss draft program concepts and draft regulation language
- Next HD I/M workgroup meeting expected in June 2021
- CARB Board Hearing date: December 9-10, 2021
- Program implementation: Phase-in starting in 2023

# Incentives are available for zero-emission trucks



- Zero-emission focus
- First-come, first-served
- Available statewide
- Up to \$150,000 for zero-emission trucks
- Additional incentive in disadvantaged communities
- 100 eligible truck and bus models
- [www.californiahvip.org](http://www.californiahvip.org)



- Available statewide
- Up to \$200,000 for zero-emission trucks
- Back-up applications accepted now
- More funding available in 2022
- [www.aqmd.gov/vw](http://www.aqmd.gov/vw)



# Support to 94607 so far

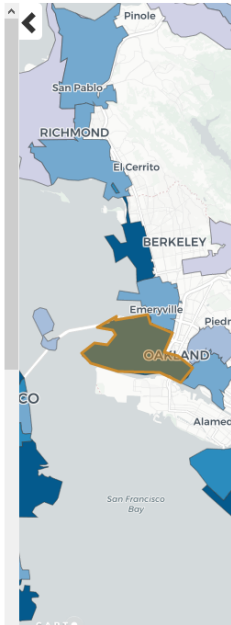


Home

Learn how HVIP-funded vehicles are benefiting California. Use filters below to explore deployed

## Select Voucher Types

<input type="radio"/> All	<input type="radio"/> Redeemed	<input type="radio"/> Unredeemed
<input checked="" type="checkbox"/> Hybrid	29%	
	Vouchers: 4	Funding: \$76,000
<input checked="" type="checkbox"/> ZEV	71%	
	Vouchers: 10	Funding: \$1,548,900
<input checked="" type="checkbox"/> ePTO		
	Vouchers: 0	Funding: \$0
<input checked="" type="checkbox"/> Natural		
Gas	Vouchers: 0	Funding: \$0
<b>Total Vouchers</b>	<b>14</b>	
<b>Total Funding</b>	<b>\$1,624,900</b>	



Search and Filter



Clear Filters

## By Location

Select a geography type.

ZIP Code

Select areas by typing below or clicking the map.

\* ZIP Code 94607



4 hybrid trucks, 7 zero-emission yard trucks, 3 zero-emission shuttle buses



Online searchable results: [www.californiahvip.org/impact/](http://www.californiahvip.org/impact/)

# Help us build a new incentive model

- More zero-emission truck options than ever before
- Smaller fleets and owner-operators face unique challenges
  - Lessons learned from our traditional incentives can help us build a new incentive model
- A few barriers and opportunities
  - Familiarity with zero-emission trucks / how they work
  - Purchase / lease price
  - Infrastructure hardware cost and location
  - Fuel (charging) cost and demand charges
  - Insurance and maintenance
  - All of these have a solution
- Looking for more input from small fleets and communities



# Questions/Direction?

- ACF/ACT – Tony Brasil [tony.brasil@arb.ca.gov](mailto:tony.brasil@arb.ca.gov)
- HD I/M – Bob Nguyen [bob.nguyen@arb.ca.gov](mailto:bob.nguyen@arb.ca.gov)
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# Back-Up Slides

# Example of Voluntary ZEV Fleet Hiring

