AB 617 COMMUNITY STEERING COMMITTEE

Wilmington, Carson, West Long Beach
August 18, 2021
AB 617
WCWLB
Outreach Updates
AB 617 TRUCK INCENTIVES WORKSHOP FOR HEAVY-DUTY TRUCKS

WALTER SHEN
PLANNING AND RULES MANAGER
Why a project plan for truck incentives?

Existing incentive programs are not working for certain fleets and small businesses in AB 617 communities.

Incentive program changes are needed to attract more participants.

Customize incentives to meet the needs of the community (e.g., prioritize small businesses).

Prioritize funding for trucks in the AB 617 communities.
Develop a Project Plan for heavy-duty trucks that includes criteria established by the AB 617 communities

Reduce barriers to access the incentive funds for cleaner trucks in the AB 617 communities

Develop a process for entities seeking funding for cleaner trucks

Customize, as needed, for each AB 617 community

Modify incentive program for cleaner trucks in the AB 617 communities

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Dates</th>
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<tbody>
<tr>
<td>1st</td>
<td>October 20, 2021</td>
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<tr>
<td>2nd</td>
<td>December 1, 2021</td>
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<tr>
<td>3rd</td>
<td>January 26, 2022</td>
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WHAT’S NEXT

- Upcoming workshop information will be provided
  - Agenda
  - ZOOM link
- Ryan Stromar (rstromar@aqmd.gov)
South Coast AQMD AB 617 Community Steering Committee Meeting

August 18, 2021
Corporate social responsibility pillars

**Enabling electric transportation**
Commitment to making the world a more sustainable place by driving electric vehicle adoption through infrastructure and education

**Environmental sustainability**
Commitment to being carbon-neutral or better, powering our stations with renewable energy and building infrastructure sustainably

**Community support**
Unlocking electrification for all, including investments and education in disadvantaged, low income and rural areas

**Equality & diversity**
Striving to achieve diversity and inclusion in everything we do, from investing to hiring and supplier relationships
Progress to date

- Largest and most powerful open fast charger network
- Reaching all California communities, including rural and disadvantaged communities
- Award winning network with highest customer satisfaction
- Expanding the market and access through education and outreach
Electrify America has over 750 chargers at 192 stations open in California. By end of 2021, Electrify America plans for > 230 stations open or under development.

**Electrify America’s California Network**

- **Station spacing:** 9 mi. (avg.), 42 mi. (hwy avg.)
- **Chargers per site:** 3-10
- **Charging speed:** 3-20 miles/minute
- **Access:** 90% of Californians live within 15 miles of a charger, 96% within 25 miles
- **Priority Communities:** 50% of Electrify America Charging Stations are in disadvantaged and low-income communities
A Green City Investment

Electrify America will be creating a Second Green City beginning in 2022.

- A Green City investment can include:
  - ZEV car share
  - ZEV transit
  - ZEV freight transport

- The second Green City will be in a community with:
  - ~500,000 people
  - Predominately consists of Disadvantaged Communities

- CARB guidance encourages a Green City investments that “promote a broad conceptual transformation of transportation systems to ZEVs”
Projects located in Long Beach and Wilmington communities

- $25 million investment

- Focused on freight and transit electric vehicle charging deployment

- Freight charging depots will serve operators of all sizes, from large to small/independent

- New, innovative technology and business models will be tested and implemented, including smart energy solutions to increase overall energy efficiency and to limit grid impact
Infrastructure investments
Long Beach – Wilmington

 Investing $25MM in transit, medium- and heavy-duty fleet charging to expand transportation, electrification and benefits in the Long Beach – Wilmington area.

Municipalities and transit agencies are looking to electrify their fleets, but face barriers:

- Limited knowledge of charging technologies and station deployment
- Limited funding
- Limited expertise in energy / utility management

Medium- and heavy-duty electrification is a top priority for both stakeholders and regulatory bodies:

- Requires dedicated sites due to footprint and safety considerations
Cycle 3 Timeline & Next Steps

We hope to invest as quickly as possible to help accelerate transportation electrification in California

- Real estate acquisition (July 2021)
- Site design & development (starting September 2021)
- Cycle 3 officially begins (Q1 2022)
- First Cycle 3 sites live (Q2 2022)
Thank you.

Contact:
Matthew Nelson, Electrify America
Matthew.Nelson@electrifyamerica.com
AB 617* requires air districts to annually report the progress of CERP implementation.

Report will be updated to include implementation totals to-date.

Annual reports sent to CSC and CARB for review.

CARB may suggest plan revisions to air districts.

*Health and Safety Code §44391.2(c)(7)
OVERVIEW OF REPORT ELEMENTS

Community Profile Updates
Overview of CERP Framework
Status of CERP Actions, Goals and Strategies
Metrics for Tracking Progress
Qualitative Assessment
Summary of Key Plan Adjustments
WCWL IMPLEMENTATION HIGHLIGHTS

- Rule 2305 – Warehouse Indirect Source Rule (ISR) – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program was adopted in May 2021

- Proposed Amended Rule 1178 - Further Reductions of VOC Emissions From Storage Tanks At Petroleum Facilities began development

- $2.4 million in Year 2 Community Air Protection Program (CAPP) Incentive funds recognized for school air filtration systems

- ~$77.7 million allocated for cleaner technology mobile sources
  - $5.57 million in Year 3 CAPP Incentive funds for Community-Identified Projects (split evenly between trucks and ships/harbor craft projects)

- Collaboration with LBACA to inform LBUSD about asthma triggers and school air filtration systems

- Community Air Monitoring Display tool available online here
TOTAL INVESTMENT IN INCENTIVES

- Future incentive-based emission reductions dependent on program funding

Approximate Emission Reductions (tons/year) to date based on Pollutant and Total Investment

- WCWLB
  - NOx: 245.6
  - PM: 5.7
  - VOC: 8.6

$72.1* Million

*Actual totals will be reflected in the annual report and do not include funds allocated for community-identified projects
**ANNUAL PROGRESS REPORT TIMELINE**

- **August 24**
  - Draft report release*

- **August 31**
  - CSC comment deadline

- **September 17**
  - Stationary Source Committee (Additional public comment)

- **October 1**
  - Governing Board Meeting

- **Mid-October**
  - Submit report to CARB staff

- **December 2021**
  - Report submitted to CARB Board for consideration

QUESTIONS OR COMMENTS?

- Please submit comments by **August 31, 2021**

Please contact:
Nicole Silva
nsilva@aqmd.gov
909-396-3384
Incentives

~$260 Million

• Total amount awarded since 2017
• Community Air Protection Program
  o Mobile Source Projects
  o Community Identified Projects
• Carl Moyer Program
• Prop 1B
• Discussions in 4th quarter 2020 and 1st quarter 2021

Implementation

~$50 Million

• Total amount awarded since 2017
• CSC Stipends
• Air monitoring equipment, contractors (e.g., ACLIMA), and data visualization
• Interpretation and facilitation services
• Staff salaries
• Today’s discussion

For a review of incentives budget please see:
AB 617 IMPLEMENTATION BUDGET

- Grant funds awarded through June 2021 total $52.7 Million
- Grant funds awarded for implementation across all South Coast AQMD AB 617 communities
- Grant 2020 was received July 2021 for $21.9 Million
AB 617 IMPLEMENTATION EXPENDITURES BY COMMUNITY

- Total AB 617 expenditures through June 2021: $51,648,938*
- Cross community expenditures totaled $16,880,200
- Remaining balance: $1,031,062†

*Expenditures are currently unaudited
†Remaining balance as of 6/30/21 equal to: $52,680,000 - $51,648,938
WCWLB IMPLEMENTATION EXPENDITURES

Staff Salaries

Services and Supplies
- Facilitator and Interpreter services
- Aerodyne contract (Ship emissions)
- Flussense contract (Refineries)
- CSC Stipends
- Rent and leases

Capital outlays
- Lab supplies
- Air pollution instrumentation (e.g., BC, ozone, NOx, particle counters)
- Data visualization

Indirect Costs
- Overhead costs
- Legal, finance, administration, etc.

$9,914,358
Total expenditures through June 2021

- Staff salaries: $2,322,847
- Services & supplies: $874,897
- Capital outlays: $1,864,092
- Indirect costs: $4,852,522
AB 617 COMMUNITY EXPENDITURES

Community Needs

- Community expenditures differ based on community needs, for example:
  - Unique air quality concerns - WCWLB Ports and Refineries require special monitoring contracts
  - Approach to community engagement - ECV had additional community working groups

Years in AB 617 Program

- Year 1, 2, and 3 communities have different implementation budgets due to the amount of time they have been in the program
  - Year 1 communities have been under implementation since 2020
  - Year 2 communities have been under implementation since 2021
  - Year 3 communities are still in development phase
CERP IMPLEMENTATION

Wilmington, Carson, West Long Beach
August 18, 2021
Between 2020 and 2022, CARB to consider new regulations (e.g., amendment of the regulation for zero-emission transport refrigeration units (TRUs)).

CERP COMMITMENTS

- Neighborhood Truck Traffic: Chapter 5d, Action 1
  
  CARB’s Regulation development for phase-in: 2024-2030
  (including Transport Refrigeration Unit and Advanced Clean Fleets)

- Railyards: Chapter 5f, Action 1
  
  Between 2020 and 2022, CARB to consider new regulations
  (e.g., amendment of the regulation for zero-emission transport refrigeration units (TRUs))
Advanced Clean Fleet (ACF) Regulation

Wilmington, Carson, West Long Beach Community Steering Committee
August 18, 2021
Suite of CARB Regulations

- Zero-Emission Requirements
  - Innovative Clean Transit
  - ZE Airport Shuttle
  - ZE Powertrain Cert
  - Advanced Clean Trucks
  - Ocean-Going Vessels at Berth
  - Commercial Harbor Craft
  - Zero-Emission Transport Refrigeration Units (Trucks)
  - Advanced Clean Fleets (Including Drayage)
  - Locomotives
  - Forklifts
  - Seaport and Railyard Cargo Handling Equipment

- Cleaner Combustion Requirements
  - CA GHG Phase 2
  - Truck OBD
  - Truck Smoke Test

Updated 7/13/21
Cleaning Up Existing Diesel Trucks

Heavy-Duty Inspection & Maintenance
Requires emission related inspections

New DMV Verification
Requires CARB compliance check upon registration

Omnibus Regulation
Tightens manufacture warranty and smoke test requirements
Advanced Clean Fleets Regulation

- **What is it?** A medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible.

- **Who is regulated?** Drayage trucks, public agencies, federal governments, and private companies that own or control trucks, buses, and shuttles.

- **What else?** 100% zero-emission vehicle sales requirement by 2040
ACF – High Priority Fleets

• “High-Priority Fleets” must phase-in zero-emission vehicles by body type and suitability

• Who are “High-Priority Fleets”?
  • Private or federal entities with over $50 million in revenue,
  • Who operate a fleet of more than 50 vehicles,
  • Or dispatches more than 50 vehicles per year.
# ACF – High Priority Fleets

<table>
<thead>
<tr>
<th>Percentage of fleet that must be ZEVs</th>
<th>10%</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
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<tbody>
<tr>
<td>Box trucks or vans, two-axle buses, yard tractor</td>
<td>2025</td>
<td>2028</td>
<td>2031</td>
<td>2033</td>
<td>2035</td>
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<tr>
<td>Work trucks, day cab tractors, three-axle buses</td>
<td>2027</td>
<td>2030</td>
<td>2033</td>
<td>2036</td>
<td>2039</td>
</tr>
<tr>
<td>Sleeper cab tractors and specialty vehicles</td>
<td>2030</td>
<td>2033</td>
<td>2036</td>
<td>2039</td>
<td>2042</td>
</tr>
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ACF – Drayage Fleets

- **2023** - All drayage trucks registering for the first time in the CARB Drayage Truck Registry must be a zero-emission vehicle

- **2035** - 100% zero-emission operations in intermodal railyards and seaports
ACF – Public Fleets

- Zero-emission vehicle purchase requirements for city, county, special district, and state agency fleets
- **2024** – 50% of new vehicle purchases must be zero-emission
- **2027** – 100% of new vehicle purchases must be zero-emission
Voluntary Recognition Program

- Recognition for fleets who exceed zero-emission fleet standards
- Recognition for entities that hire fleets who meet or exceed zero-emission fleet standards
- Branding and marketing to accelerate the deployment of medium- and heavy-duty zero-emission vehicles
How will ACF be enforced?

- Reporting requirements
- Fleet audits
- Crosschecking databases
- Roadside inspections
- High priority entity/government agency hold responsible
How will ACF align with your Air Quality Priorities?

- **Ports – Action 3:**
  Reduce emissions from port equipment and drayage trucks

- **Neighborhood Truck Traffic – Action 2:**
  Reduce emissions from heavy-duty trucks
How to Get More Information

- Email – zevfleet@arb.ca.gov

- Advanced Clean Fleet Rule website: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets
Transport Refrigeration Unit Regulatory Update

AB 617 Community Steering Committee Meeting
Wilmington/Carson/West Long Beach
August 18, 2021
Current TRU ATCM

- Adopted in 2004 (amended in 2010 and 2011)
- Requires TRU engines to meet in-use particulate matter (PM) standards by the end of the 7th year after the engine model year
  - All TRUs ultimately required to meet the Ultra-Low-Emission TRU (ULETRU) In-Use Performance Standard (85% diesel PM reduction)
- Requires CARB registration of California-based TRUs
Need for Additional TRU Emission Reductions

• Elevated health risk to nearby communities
• SIP attainment (South Coast, San Joaquin Valley)
• Multiple risk reduction, air quality, and climate goals
• Executive Order N-79-20
Near Source Health Risk from TRUs
Assembly Bill 617
Communities with TRU Concerns

- Boyle Heights
- Carson
- Eastern Coachella Valley
- East Los Angeles
- Muscoy
- San Bernardino
- San Diego Portside Environmental Justice Neighborhoods
- Shafter
- South Central Fresno
- Southeast Los Angeles
- West Commerce
- West Long Beach
- West Oakland
- Wilmington
Staff Propose to Transition TRUs to Zero-Emission in Two Rulemakings

Part 1: Truck TRUs (Board consideration in September 2021)
- California-based
- Local and regional operations
- Return-to-base operations

Part 2: Trailer TRUs, container TRUs, railcar TRUs, TRU generator sets (Board consideration in 2024)
- California and out-of-state-based
- Often used in long-haul operations
- Typically do not return-to-base each day
- Staff also plan to address direct-drive refrigeration units in Part 2
Key Elements of Part 1

- Zero-emission truck TRUs
- PM emission standard for newly-manufactured TRU engines
- Lower-global warming potential refrigerant
Key Elements of Part 1 (continued)

- Additional requirements to support enforcement
  - Expanded TRU reporting
  - TRU compliance labels
  - Facility registration
  - Facility reporting or turn-away of non-compliant TRUs
  - Vehicle owner and driver requirements
Applicable Facility Types and Size Thresholds

- **Refrigerated Warehouses or Distribution Centers**: Building size greater than or equal to 20,000 square feet and has TRU activity.

- **Grocery Stores**: Building size greater than or equal to 15,000 square feet and has TRU activity.

- **Seaport Facilities and Intermodal Railyards**: No square foot size threshold – All seaport facilities and intermodal railyards with TRU activity.
Estimated Emission Reductions from 2022 to 2034

- 1,258 tons of PM2.5
- 3,515 tons of NOx
- 1.42 million metric tons of carbon dioxide equivalents

Statewide PM2.5 Emissions from Truck TRUs under the Proposed Amendments

Statewide PM2.5 Emissions from TRUs (excluding Truck TRUs) under the Proposed Amendments
Estimated Individual Resident Cancer Risk and Risk Reduction

Cold Storage Warehouses
- 2019: 1,600
- 2024: 1,300 (-12%)
- 2030: 700 (-58%)

Grocery Stores
(7 Trucks, 2 Trailers, 1 Seasonal Scenario)
- 2019: 300
- 2024: 260 (-13%)
- 2030: 80 (-72%)

Cancer Risk (chances per million)
Baseline • Proposed Amendments

CARB
Next Steps

- Part 1
  - September 13, 2021 – Public comment period ends
    https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=tru2021
  - September 23, 2021 – First Board Hearing
  - Early 2022 – Second Board Hearing
- Part 2 technology assessment
Additional Information

- TRU webpage: https://www.arb.ca.gov/TRU

- Contacts:

  Lea Yamashita, Lead Staff
  Lea.Yamashita@arb.ca.gov

  Cari Anderson, Chief, Freight Transport Branch
  Cari.Anderson@arb.ca.gov
UPDATE ON COMMUNITY AIR MONITORING IN WCWLB
OLGA PIKELNAYA PH.D
PROGRAM SUPERVISOR

Visualization of VOC emissions measured by ORS Mobile laboratory.

Wind

VOC emission

ORS Mobile Laboratory

Optical Multi-Pollutant Analyzer

South Coast AQMD - Rule 1180 Community Air Monitoring

Rule 1180 Data Platform

Resurrection Church Monitoring Station

wind

VOC emission

ORS Mobile Laboratory

Optical Multi-Pollutant Analyzer

South Coast AQMD - Rule 1180 Community Air Monitoring

Rule 1180 Data Platform

Resurrection Church Monitoring Station
OUTLINE

- Refinery Baseline Measurements:
  
  CERP Refinery VOC Emission Reduction Goal: “Baseline emissions to be assessed by advanced air monitoring techniques, and the progress identified as the ratio of baseline and future measurements using the same methods”
  
  - Overview of Baseline Measurements and Methodology

- Refinery Monitoring:
  
  CERP / Action #2: “Conduct refinery air measurements to identify and address VOC leaks”
  
  - Rule 1180 SO₂ refinery exceedance event

- Monitoring Near Oil Wells:
  
  CERP / Action #5: “Conduct mobile air measurements around active, idle and abandoned oil drilling sites to identify potential leaks”
  
  - Community Oil Wells Pilot Sampling Initiative
MOBILE ORS MEASUREMENTS REFINERY EMISSIONS: PRINCIPLE OF OPERATION

BASELINE REFINERY EMISSIONS: MEASUREMENTS PLAN

- Four 2-month measurement periods distributed over July 2021 through June 2022
  - First measurement period started on 7/20/21
- Minimum of five valid measurement days for each facility
- Highly localized wind data measured near refinery
REFINERY MONITORING: RULE 1180 PROGRAM

- Rule 1180 Refinery Fenceline and Community Air Monitoring
  
  **Fenceline Air Monitoring**
  - Refineries: fenceline air monitoring of air toxics and other pollutants
  
  **Community Air Monitoring**
  - South Coast AQMD: network of air monitoring stations in communities adjacent to refineries

https://xappprod.aqmd.gov/Rule1180CommunityAirMonitoring/
SO₂ exceedances recorded at the Marathon Refinery Complex along 6 fenceline paths on July 16, 2021 between ~11:30 am and ~1:30 pm

- Exceedance level for sulfur SO₂ is 75ppb (1-hr NAAQS and CAAQS); measured as a 1-hr rolling average
- No exceedances recorded after 1:30 pm

South Coast AQMD inspectors initiated an on-site investigation, including conducting inspections at Marathon and other refineries in the area; the investigation is still ongoing
- Rule 1180 notification threshold was exceeded at St Luke between ~12:00 pm and ~1:00 pm
- All other pollutants remained within typical levels at all monitoring stations in WCWLB
- Winds were coming predominantly from the South
Oil Well emissions are often intermittent and variable in magnitude

Community member involvement helps address oil well concerns more effectively

South Coast AQMD has identified and is in the process of procuring suitable hand-held VOC devices for this task

Collaborative pilot project with C.F.A.S.E. is scheduled to begin in late August

COMMUNITY OIL WELLS PILOT SAMPLING INITIATIVE

Monitoring by Community Members
Information Provided to South Coast AQMD
Discussion with Community and Additional Air Monitoring if Appropriate
Inspection by South Coast AQMD and Appropriate Enforcement Action
Corrective Actions by Operator Verified
DISCUSSION

- Comments, Suggestions, Questions

Please contact:
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909-396-3157
**NEXT STEPS**

### Future Announcements
- Newsletters or emails
- Continue CERP implementation

### Future Meeting
- Tentatively October 14, 2021 (virtual)
- AQ Priority Updates & Agenda Topics
  - [ ] What would you like to hear about?
Public Comment
SOUTH COAST AQMD CONTACTS: WCWLB

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