



WAREHOUSE ISR WORKING GROUP

8/23/19



OVERVIEW

- Background
- Other Key State and Federal Activities
- Proposed Regulatory Concept
- Schedule
- Expected Topics for Future Meetings:
 - Technical Approach for Indirect Source Rule Menu
 - Role for Incentives
 - SIP Credit

BACKGROUND

- Nine warehouse working group meetings since adoption of AQMP in 2017
- Recent discussion has focused on structure of rule - ‘How would facilities comply?’
 - Many options presented in previous meetings
- Most recent WG meeting discussed two potential approaches in more depth
 - Facility cap and fleet crediting system
 - Significant concerns raised about both approaches and neither approach is being pursued further at this time

Menu of Potential ISR Compliance Options	
Facility Caps	<ul style="list-style-type: none">• XX% below baseline emissions (<i>SJVAPCD approach</i>)• <XX pounds of emissions per day per facility• <XX pounds of emissions per goods throughput unit
SOON Program Approach	<ul style="list-style-type: none">• Indirect sources must apply for incentive funds and use them if available (e.g., warehouse operators that own fleets must apply for funding to replace trucks and use it if awarded)
Local Govt. Measure	<ul style="list-style-type: none">• Local gov. programs/ordinances can be put directly into SIP (e.g., ordinance requiring new warehouses install alt. fueling infrastructure)• Similar approach available in Rule 2202
Crediting/Banking Program	<ul style="list-style-type: none">• Clean fleets generate credits managed through a bank and ISR facilities must obtain and retire credit• Potential for localized overlay
Voluntary Fleet Certification Program	<ul style="list-style-type: none">• Fleet owners may certify that fleets are cleaner than required by CARB regulation• Facility owners required to use XX level of certified fleets
Onsite Best Management Practices	<ul style="list-style-type: none">• Utilize ZE/NZE equipment onsite• ZE/NZE fueling/charging infrastructure• Solar/energy storage
Mitigation Fee	<ul style="list-style-type: none">• Pay a mitigation fee if other compliance options not chosen• Collected funds are used to incentivize ZE/NZE equipment

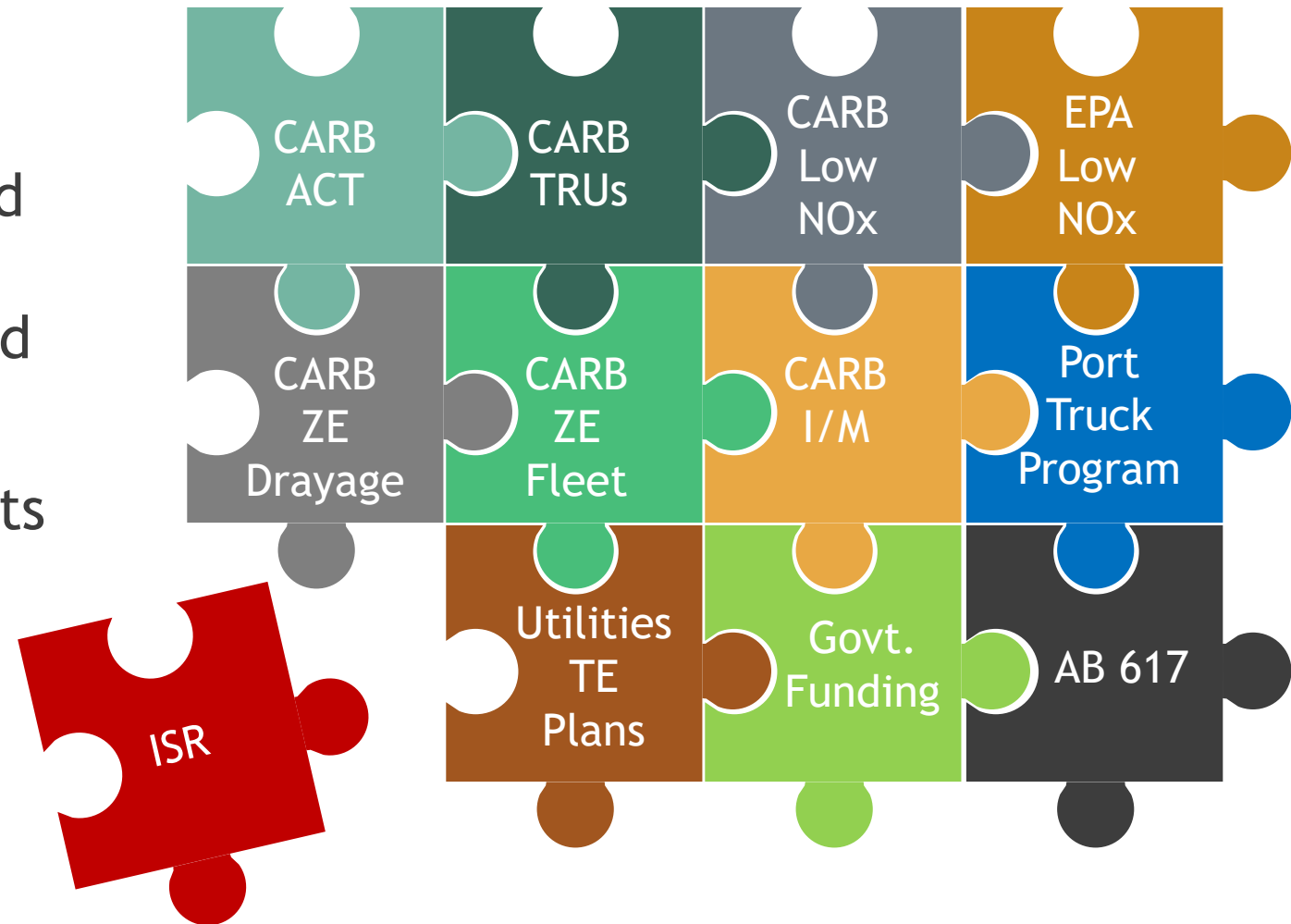
OTHER SIGNIFICANT STATE AND FEDERAL ACTIVITIES AFFECTING TRUCKS SINCE ISR RULEMAKING BEGAN

Agency	Upcoming Action	Expected Decision	Expected Phase-in Period
U.S. EPA	Cleaner Truck Initiative – In response to a petition from South Coast AQMD, EPA has committed to updating its truck engine standard to reduce NOx emissions.	2020-2021	2025-?
CARB	Transport Refrigeration Unit Regulation – Measure to reduce residual risk from TRUs by transitioning to zero-emission technologies.	2019	2025-2030
	Drayage Truck Rule – Updated regulation to transition to zero-emission trucks.	2022	2026-?
	Advanced Clean Truck Rule – Requires truck manufacturers to sell an increasing percentage of zero-emission trucks by 2030 (up to 15% or 50%, depending on truck type). Also will require one-time fleet reporting for large businesses.	2019	2024-2030
	Zero-Emission Fleet Rule – Would require some fleets to transition to zero-emissions.	2022	2024-?
	Heavy-Duty Low NOx Program – Would set new statewide engine standards, test cycles, and warranty and durability requirements to reduce NOx from trucks	2020	2021-2027
	Heavy-Duty Inspection/Maintenance Program – Would set new I/M requirements to ensure emissions controls are functioning properly	2020+	2020-?
Ports	Clean Truck Program – Will establish a rate that trucks need to pay to enter the Ports beginning in 2020 if they are not near-zero emissions. Only zero-emission trucks will be exempt from the rate by 2035.	2019	2020-2035

& CONTINUED PURSUIT OF INCENTIVE FUNDING + AB 617 + UTILITIES TE PLANS

ROLE OF WAREHOUSE ISR RELATIVE TO OTHER STATE AND FEDERAL ACTIVITIES

- Warehouse ISR aims to:
 - Facilitate and enhance local and regional emission reductions together with all other state and federal activities
 - Focus on actions and investments that facilities can make
 - Provide multiple options for compliance





PROPOSED REGULATORY CONCEPT - MENU-BASED POINTS SYSTEM

WAREHOUSE ACTIONS & INVESTMENTS TO REDUCE EMISSIONS (WAIRE PROGRAM)

PROPOSED CORE OF THE WAIRE PROGRAM

- Central piece of warehouse ISR will be a menu of actions/investments for facility operators to implement
 - Similar to LEED and other systems (e.g., SB County GHG Plan)
- Each menu item will have a specified number of ‘points’ (WAIRE Points) associated with it
- Facility operators will be required to complete a specified number of WAIRE Points each year

DRAFT COMPONENTS OF PROPOSED RULE

- a) Purpose & Applicability
- b) Definitions
- c) Requirements
- d) Calculation Methods
 - Supplemental Guidelines
- e) Reporting, Notification, and Plans
- f) Recordkeeping
- g) Compliance Auditing and Enforcement
- h) Administrative Fee
 - Attached Menu of Compliance Options

DRAFT PURPOSE & APPLICABILITY

- Purpose is to facilitate local and regional emission reductions through actions and investments at warehouses
- Applicability:
 - All operators of warehouses greater than 100,000 square feet in building area
 - Includes operators who lease a portion of a warehouse that is >100k sf
 - A warehouse operator is the primary entity with operational control over the facility
 - Rule would not directly apply to warehouse owners or fleet owners
 - Warehouse and/or fleet owners required to comply only if they are a warehouse operator
 - Warehouse and/or fleet owners may have voluntary role even if they are not the warehouse operator

DRAFT REQUIREMENTS

- Every year, facility operators must demonstrate that they have earned XX WAIRE Points
- WAIRE Points are earned based on actions/investments specified in Menu (see slides below)
 - WAIRE Points can be earned from any Menu item, or multiple Menu items
 - WAIRE Points only earned from actions/investments that have already occurred in the previous year
 - Over-compliance in one year can be carried over into future years
- The number of WAIRE Points that each facility operator must earn will be based on the number of truck trips to that facility

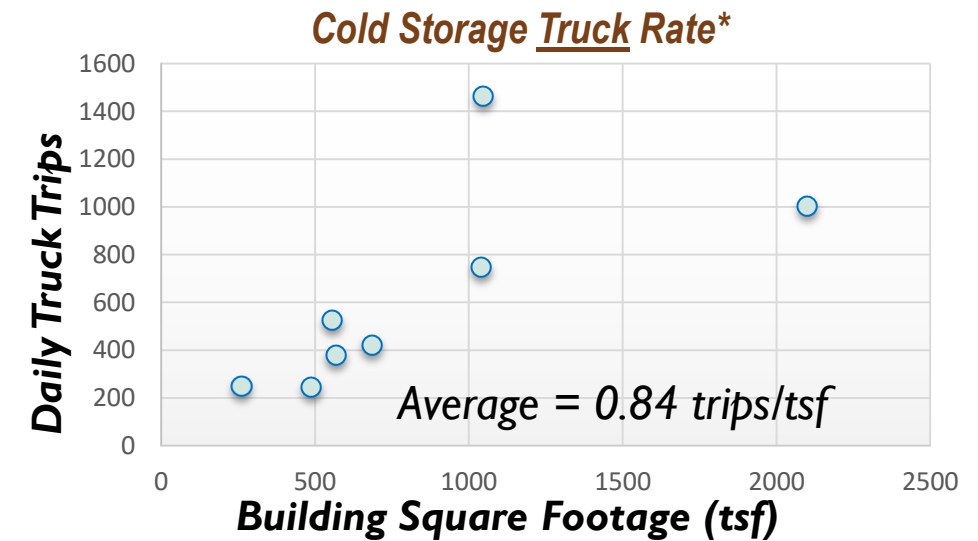
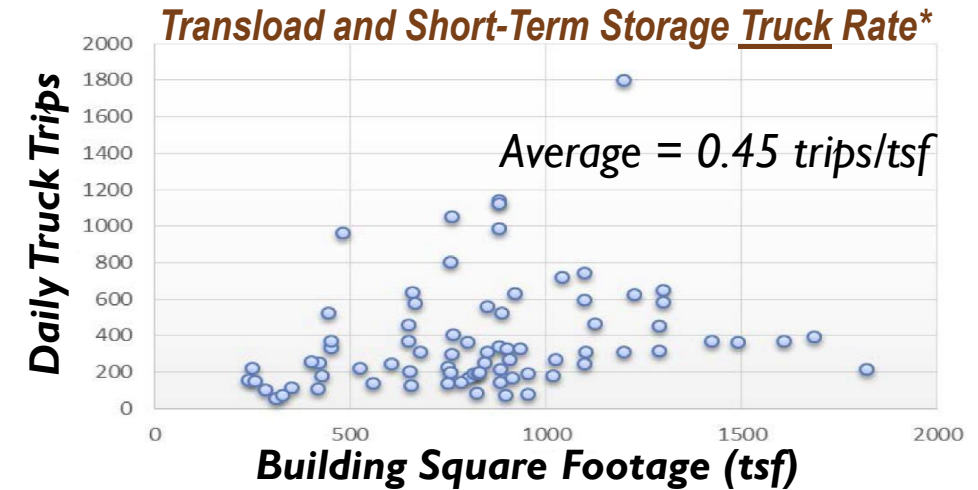
RELATIONSHIP BETWEEN TRUCK TRIPS AND BUILDING SIZE

- Two primary methods typically used to determine truck trips at a facility
 1. Default trip rates from studies
 2. Direct measurement and/or recordkeeping at the facility
- Default truck trip rates established by organizations like Institute for Transportation Engineers and local transportation agencies



RELATIONSHIP BETWEEN TRUCK TRIPS AND BUILDING SIZE - CONTINUED

- Truck trip rates vary between different warehouse types and different individual warehouses
- Seeking input on how to include default and/or actual truck trip rates into rule



DRAFT
MENU
ONE-TIME
ACTIONS

- Points earned only for actions beyond CARB regulatory requirements

One-Time Actions/Investments

- Install onsite truck ZE charging/fueling stations and infrastructure
- Install near-site truck ZE charging/fueling stations and infrastructure
- Establish new onsite or near-site areas for repairs/overnight rest
- Install plugs/infrastructure for Transportation Refrigeration Units (TRUs)
- Purchase ZE TRUs
- Purchase ZE yard trucks
- Purchase ZE or NZE on-road trucks
- Install onsite solar panels
- Install onsite energy storage (e.g., batteries)
- Install air-filtration for surrounding sensitive receptors

➤ ***Suggestions for additional items?***

DRAFT
MENU
ONGOING
ACTIONS

- Points earned only for actions beyond CARB regulatory requirements

Ongoing Actions/Investments

- Use onsite truck ZE charging/fueling stations
- Use TRU plugs
- Use ZE TRUs
- Use ZE yard trucks
- ZE/NZE truck visits
- Produce electricity from solar panels
- Use onsite energy storage
- Provide filters for air-filtration systems for surrounding sensitive receptors
- Establish employee commute reduction program for warehouses with <250 employees (not currently required to comply with Rule 2202)
- Educate drivers about local truck routes, off-site parking, and idling limits
- Pay mitigation fee directed to a) trucks or b) ZE charging/fueling stations

➤ **Suggestions for additional items?**

DEVELOPING THE VALUE OF WAIRE POINTS

- Points earned based on metrics established for each menu item
 - Example: XX ZE truck visits = YY WAIRE Points
- Some menu items may be split into sub-items that can earn points
 - Example: Installing charging infrastructure → permitting, trenching, panel upgrades, etc.
- Key factors for determining point value
 - Cost, local exposure benefit, emission reduction potential
 - Others?
- Future working groups will focus on technical approach for specific menu items

KEY AIR QUALITY CHALLENGES - LOCAL PROXIMITY MATTERS



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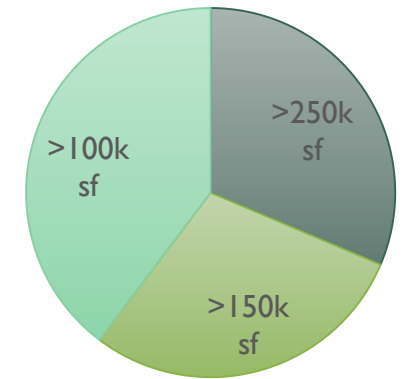
HOW WOULD THE PROPOSED REGULATORY CONCEPT ADDRESS LOCALIZED AIR QUALITY IMPACTS?

- Nearly all menu items focus on actions at or near a facility
- Some menu items may be weighted heavier if a facility is near sensitive receptors
 - Example: A facility adjacent to a school with diesel yard trucks could potentially get more points for switching to ZE yard trucks than a facility with no nearby sensitive receptors
- Funds from any mitigation fees paid would be directed back to the area where the fee came from
- Potential for mandatory requirements?
 - Truck driver education about truck routes, offsite parking, idling, incentives, etc.
 - Others?

DRAFT REQUIREMENTS - TIMING

- Year 1 • Operators of facilities ≥ 250 k sf must earn XX WAIRE Points
- Year 2 • Operators of facilities ≥ 150 k sf must earn XX WAIRE Points
- Year 3 • Operators of facilities ≥ 100 k sf must earn XX WAIRE Points

Warehouse Population



Total Population = 2,585

- Stringency of rule will also increase through time
 - Amount and timing of increase still to be determined

REPORTING, NOTIFICATION, AND PLANS

- Reporting: Facility operators must submit an Initial Site Information Report on January 1, 2021
 - Site Information Report
 - Alt. fueling/charging infrastructure: Number of chargers/fueling stations installed (cars, on-road trucks, forklifts, yard trucks), fuel type, total fuel dispensed
 - Truck trips: Number of truck trips in the previous year and anticipated in next year, by truck size
 - On-road trucks controlled by facility operator at that facility: How many, class, fuel type, total VMT by class and fuel type, typical dwell time at facility by class
 - Solar + onsite energy storage: Size of system, annual production/usage
 - Yard trucks: How many, fuel type, and total annual operational hours

REPORTING, NOTIFICATION, AND PLANS - CONTINUED

- Notification: Facility operators must notify South Coast AQMD within one month of taking over operations of a warehouse
 - Notification must include Site Information Report
- Plan: Six months before the first WAIRE Points are due from a facility, the facility operator shall indicate how they intend to earn WAIRE Points
 - Plan would not require South Coast AQMD approval
- Reporting: On July 1 annually, facility operators must report how they earned the required number of WAIRE Points

PROPOSED SCHEDULE (TENTATIVE)

Date	Key Activity
9/19/19	Working Group
9/20/19	Mobile Source Committee Update on all FBMSMs
10/29/19	Working Group
Early November	Evening Public Meetings in Inland Empire and LA County
Mid November	Release Preliminary Draft Rule and CEQA Notice of Preparation
12/10/19	Working Group
1/17/20	Mobile Source Committee Update
Mid January	Release CEQA Draft Environmental Assessment
1/30/20	Working Group
2/14/20	Release 75-day package (Draft Rule, Draft Staff Report, Draft Socioeconomic Analysis)
3/17/20	Public Workshop
3/20/20	Mobile Source Committee
3/31/20	Release 30-day package
5/1/20	Public Hearing to consider adoption of Warehouse ISR

NEXT STEPS

- Continue to develop rule concept and draft rule language
- Continue to receive input from stakeholders
- Contact:
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 - Victor Juan, vjuan@aqmd.gov, (909) 396-2374
 - www.aqmd.gov/fbmsm for more info