

# Warehouse Distribution Centers Indirect Source Rule and Other Facility-Based Measures



Working Group Meeting  
August 1, 2018

FBMSM

# Agenda

---

- Background & Upcoming Process
- Economic Impact Study of Warehouse ISR Request for Proposals (RFP)
- Initial Discussions:
  - Fleet Certification Program
  - CEQA Mitigation Fund
- Other Activities
- Next Steps

# Background

## Indirect Source Rule and Other Facility-Based Measures

---

- SCAQMD staff recommendations to Board (March 2018)\*
  - Develop voluntary measures and a new indirect source rule with multiple compliance options
- Board direction (May 2018)
  - Staff should pursue development of both voluntary and regulatory strategies
    - Additional economic analysis
    - Status updates to the Board every 3-6 months

\* [www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2018/2018-mar2-032.pdf](http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2018/2018-mar2-032.pdf)

# Board Approved Warehouse Strategies

## Potential Voluntary Measures

- CEQA Air Quality Mitigation Fund for new projects
- Warehouse Guidance Document (with CARB)
- Explore Green Delivery options (e.g., opt-in fee paid by consumers to fund cleaner fleets)

## Potential Regulatory Measures

- ISR Compliance options:
  - On-Site Measures
    - Zero/Near-Zero Emission On-site equipment
    - EV/alt. fueling infrastructure
    - Solar panels/electrical storage
  - Voluntary Fleet Certification + Facility Requirement
  - Mitigation fee
  - Others?

## Analyses and Reporting

- Rulemaking Analyses
  - Anticipated Emission Reductions
  - Cost of Compliance
  - Economic Impact Study + 3<sup>rd</sup> party review
  - Impact of ISR on Industrial Real Estate Market
  - Technological Availability

# Upcoming Process

---

## ➤ Rulemaking Process

- Site Visits
- Warehouse/Trucking industry business model research
- Community impact research
- Working Groups
- Economic Impact Studies
- CEQA
- Board

## ➤ Voluntary Strategies Process

- Varies by strategy, all will include public process



# RFP for Warehouse ISR Impacts Study



- Assist staff with studying cost and economic impacts of a potential warehouse ISR
- Estimate range of potential costs to industry based on hypothetical scenarios that can inform rulemaking
  - Staff can develop scenario costs based on technology implementation/timing, study will evaluate how costs impact industry
- Seek Board approval for September release of the RFP (reviewed by July Mobile Source Cmte.)
- Allow for possibility of multiple contractors working on separate tasks to match their expertise

# Initial Compliance Option Concepts for Warehouse ISR



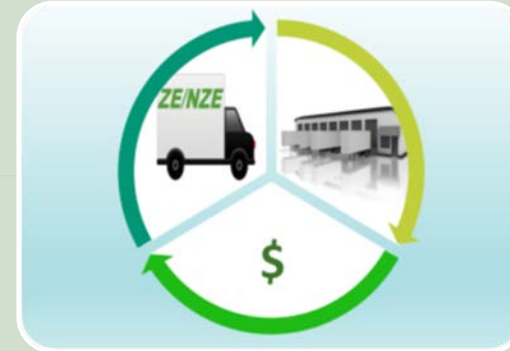
## Clean Fleets Requirement

- Fleets voluntarily certify if they are cleaner than CARB Truck & Bus Reg.
- Warehouses must ensure that truck fleets visiting a warehouse on average are cleaner than CARB Truck & Bus Reg.



## On/Near-Site Measures

- Obtain or facilitate on-site or near-site NOx emission reductions
  - Reefer plug-in, fueling/charging infrastructure, solar, etc.



## Mitigation Fee

- Fee collected from warehouse if other compliance options not chosen by facility
- Collected fees would fund clean equipment



## Others

# Fleet Certification Program (FCP) Coupled with ISR

## Fleet Owners/Operators

- Registering fleets in this program is *Voluntary*
- Fleet certification would be a standalone program
  - Integrated with ISR and incentive programs
- Fleets registered in this program would be certified that their fleet is on average XX% cleaner than required by the Truck and Bus Regulation



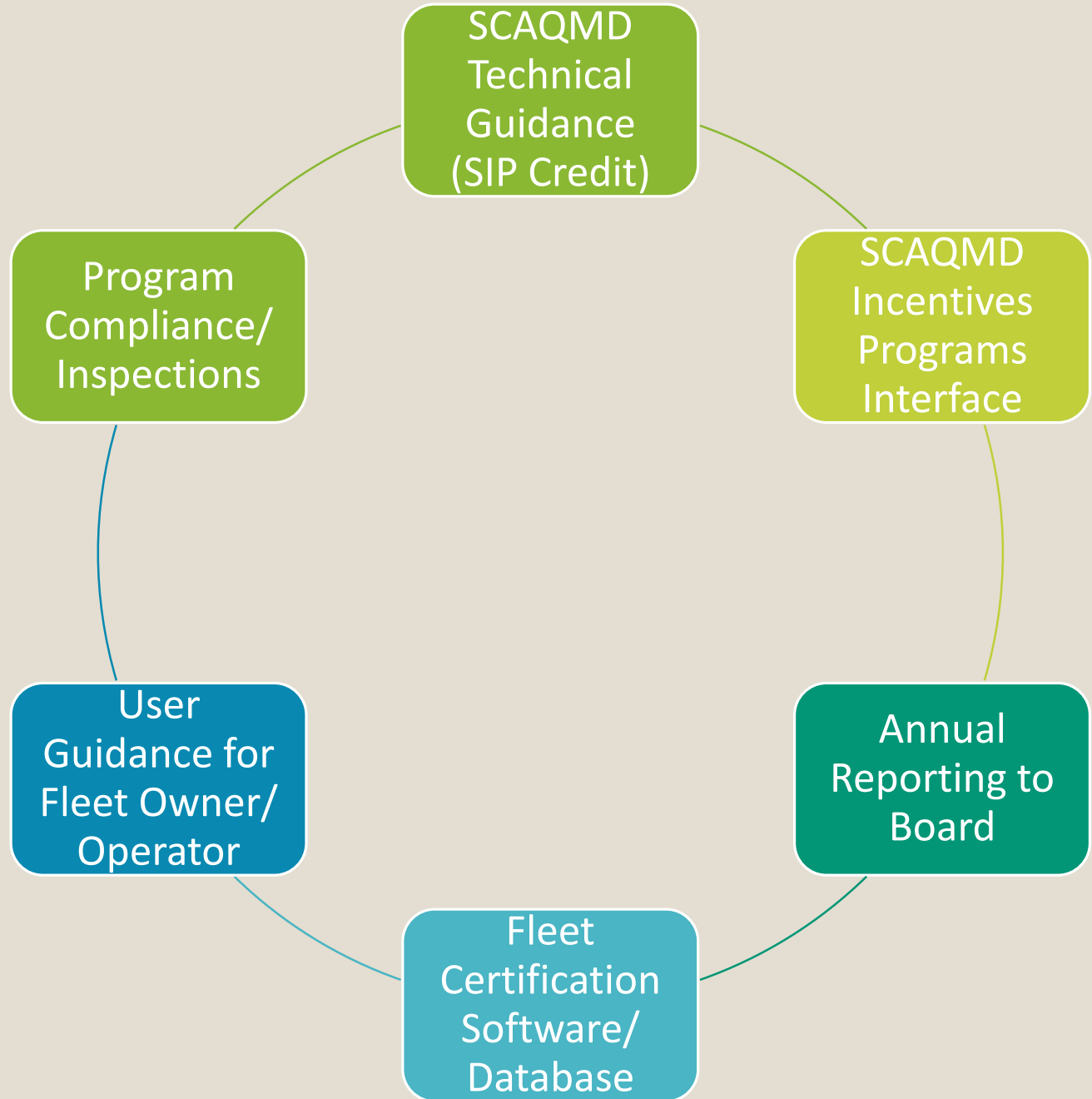
## Warehousing Facilities

- If facilities choose 'Clean Fleets' as the sole compliance option, they would be required to ensure that fleets are YY% cleaner than the Truck and Bus Regulation
  - Facilities could check fleets against available FCP-certified fleet database
- Fleets serving warehouses that are not certified under FCP are assumed to be compliant with the Truck and Bus Regulation for purposes of ISR



# Initial Key Elements for Fleet Certification Program (FCP)

Each element to be developed as part of Rulemaking



# Initial Concepts for FCP Key Elements

## Technical Guidance (SIP Credit)

- Methodology for emissions reductions calculations
- Analysis showing “surplus, permanent, verifiable, and quantifiable” emissions reductions
- Guideline & requirements
- Administrative procedure
- Inspection and monitoring
- Tracking and record keeping

## District Incentives Programs Interface

- Consolidate FCP and internal incentive programs data
  - Addresses SIP Credit and double counting
- Can potentially direct users to available incentive programs

## Annual Reporting to Board

- Annual report from staff highlighting:
  - Achieved emissions reductions
  - Assessment of functionality of FCP Program
  - Compliance report
  - Statistics, etc.
- Revisit FCP Technical SIP Credit Guidance, and provide recommendations and improvements as needed

# Initial Concepts for FCP Key Elements - Continued

---

## Fleet Certification Software/Database

- Receive and store fleet information
- Process/approve FCP applications
- Build database including fleet information such as:
  - Fleet population and makeup
  - Fleet activity
- Portals for fleets, warehouse operators, freight forwarders, etc.

## User Guidance and Support for Fleet Owner/Operator

- Guidance for FCP users to participate in the program
- Website for FCP
  - Periodic training webinars
  - Tutorials
- Hot-line or help desk to:
  - Answer user questions and trouble shoot
  - Receive public comments

## Program Compliance/Inspections

- Assigned staff to perform FCP inspections/audits
- Procedures for program compliance

# Topics for Group Discussion

---

- Are there existing public or private programs that can be utilized/leveraged for this fleet certification program?
- What kind of information potentially collected in a FCP might be considered confidential?
- What are the best ways to reach out to fleets when implementing a FCP?
- What would inhibit the use of an FCP by a fleet?

# CEQA Air Quality Mitigation Fund for Warehouses - Concept

Project with Significant AQ Impacts based on Existing CEQA NOx Regional Threshold

Project Contributes \$ to Mitigation Fund

Fund Provides \$ for ZE/NZE Vehicles

•CEQA AQ Impacts Reduced

- Primary goal is to reduce a warehouse project's *operational* NOx emissions by investing in *surplus* NOx emission reductions from mobile sources
- Program can potentially be expanded in the future to cover any land use project, and also construction emissions
- Potentially will be pursued together with New/Re-Development Facility Based Measure
- Potentially creditable towards ISR



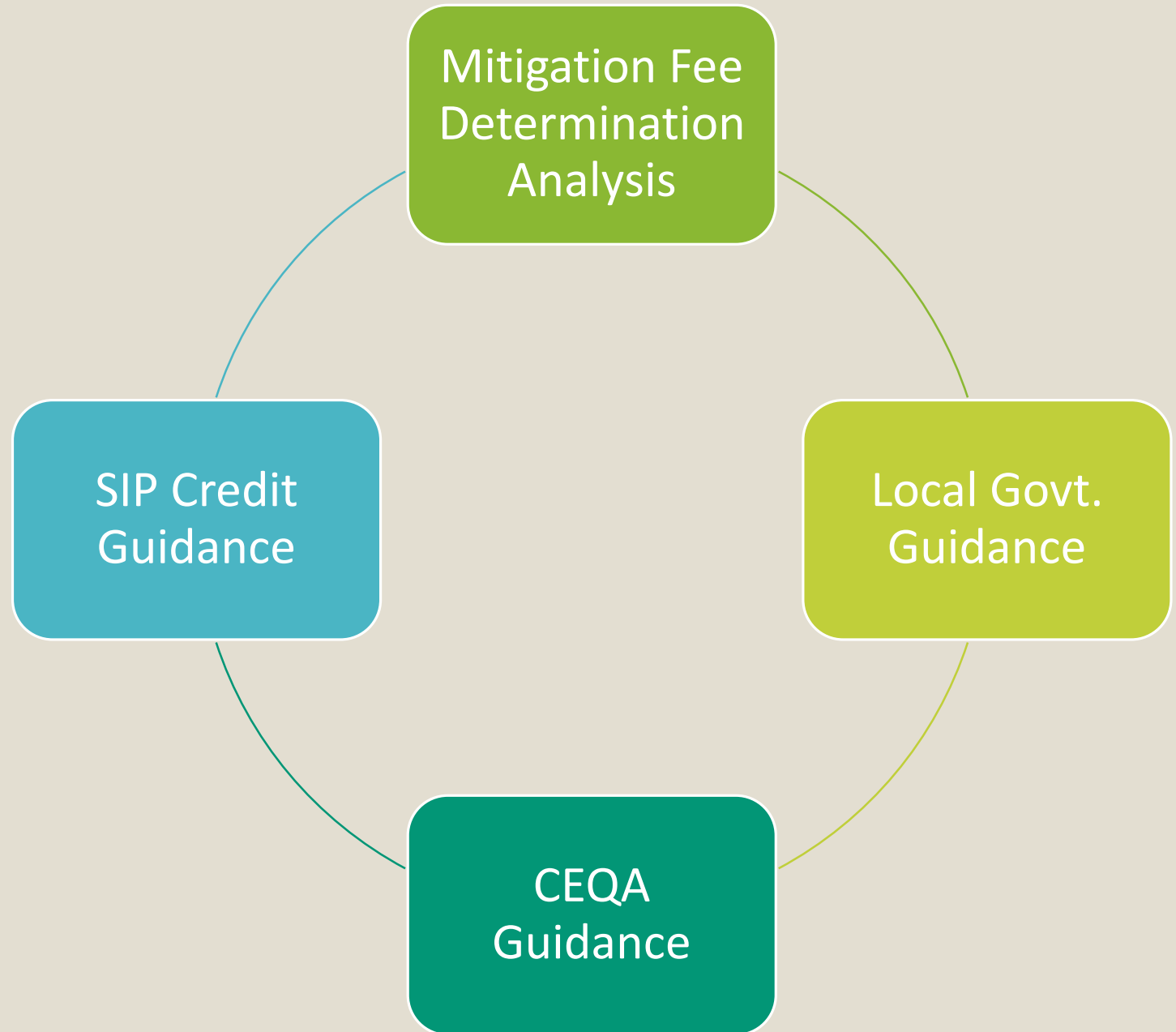
# CEQA Air Quality Mitigation Fund for Warehouses - Concept (cont'd)

---

- Local agencies could have a role in program administration
- Fees collected could be used for multiple types of projects
  - Regional NOx reduction projects
    - Likely SIP creditable
  - Other local government air quality projects
    - Some project potentially SIP creditable (e.g., lower emission vehicles)
    - Some projects potentially provide air quality benefit but may not be SIP creditable (e.g., charging infrastructure, exposure reduction projects, etc.)
    - Guidance documents needed
    - Compliance mechanisms will need to be developed (e.g., MOU, rule, etc.)

# Initial Key Elements for Warehouse CEQA Air Quality Mitigation Fund

- Public process for developing program will include focused subgroup of Warehouse Working Group
  - August 23, 2018  
1:30 – 3:30 pm  
*(tentative)*



# Mitigation Fee Comparisons

	Mandatory	Determination of Fee Level	Mitigation Location	Administration	Implement Date	Fee Level
<b>SJVAPCD VERA</b>	No	Cost-Effectiveness Study	Anywhere in the air district	Air District	2005	\$93,500/ton (one-time) (~\$1.77/sf for a warehouse)*
<b>WRCOG TUMF</b>	Yes	Nexus Study	Identified infrastructure in the COG	COG/JPA	2003	~\$0.81/sf (warehouse) (one-time)
<b>Western Riverside RCA MSHCP</b>	Yes	Nexus Study	Elsewhere in Western Riv. Co.	Commission/ JPA	~2004	\$0.16/sf (total land) (one-time)
<b>WLC Settlement Agreement</b>	Yes	Litigation Negotiation	SCAQMD	Air District	2016+	\$0.64/sf (warehouse) (one-time)
<b>RCTC Study (Draft)</b>	Potentially	Nexus Study	Riverside County	RCTC	?	\$1.28/sf (warehouse) (one-time)

\*Draft SCAQMD staff calculation – San Joaquin Valley APCD does not have a warehouse-specific fee rate

# Mitigation Fee Example: SJVAPCD Programs: ISR + CEQA Mitigation

- Rule 9510 (ISR) requires reduction of construction and operational emissions beyond baseline calculation
  - Compliance through project design features (on-site measures) or off-site fees

Project Phase	NOx	PM10
Construction	20%	45%
Operation	33%	50%

- Voluntary Emission Reduction Agreement (VERA) program
  - Contractual agreement provides \$\$ for reducing a project's CEQA AQ impacts to less than significance levels, or preferably "net zero"
  - Limits project exposure to legal challenge
  - Can be credited toward ISR compliance
- Off-site fees & VERA funds are used for emission reductions anywhere in the SJVAPCD via existing incentive programs

~\$58 million  
collected from  
ISR + VERA  
(Mar '06 - Jun '17)

# *Mitigation Fee Examples:* Key Components from Other Programs

---

- WRCOG Transportation Uniform Mitigation Fee
  - Local jurisdictions adopt ordinance authorizing participation
  - Administered by Western Riverside COG - JPA
- World Logistics Center
  - SCAQMD Board has flexibility to spend funds - from CEQA settlement
- Western Riverside Multiple Species Habitat Conservation Plan
  - Local program includes explicit interaction with state and federal entities



# Potential Mitigation Fund Concepts

---

- Two potential concepts considered
  - CEQA project threshold approach
  - Regional, nexus study approach
- Staff seeking input on these concepts or other potential approaches

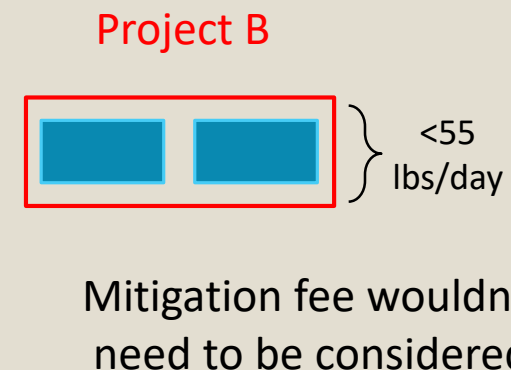
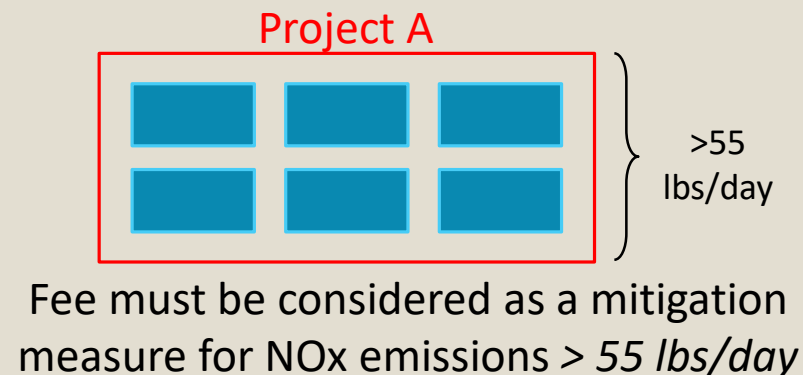
# Warehouse CEQA Air Quality Mitigation Fund Fee Determination - CEQA Project Threshold Approach

---

- Determine the operational NOx emissions from a “typical” 1M sf warehouse project with CalEEMod software
- Use Carl Moyer guidance to determine emissions benefit from replacing trucks
  - Ten year-old heavy-heavy duty diesel truck replaced with a near-zero emissions truck (0.02 g/hp-hr)
    - 40,000 mile per year per truck
  - Assume \$100,000/truck incentive
  - Assume 7-year truck replacement project life (and emissions benefit)
    - Emissions benefit declines through time due to CARB’s Truck and Bus Rule
- Determine potential one-time mitigation fee every calendar year

# Warehouse CEQA Air Quality Mitigation Fund CEQA Project Threshold Approach - Considerations

- Fee changes through time due to Truck and Bus Rule
  - Initial estimate ~\$1-\$3 per sq. ft. depending on the year
- Different warehouse sizes results in different fee rates per square foot
  - Under CEQA, mitigation only must be considered if CEQA threshold is exceeded (e.g., 55 lbs NOx/day)
  - Example:



# Warehouse CEQA Air Quality Mitigation Fund Fee Determination - Regional Nexus Study Approach

---

- Develop a flat, uniform fee through a nexus study
  - Based on increased NOx emissions projected from all new warehousing development in the SCAQMD region or a specific jurisdiction
  - Set target based on projected regional emissions growth
    - Emission reduction target doesn't need to correspond to a project's CEQA significance
    - Could be tied to the "fair share" of emission reductions from growth of the warehousing sector
      - "Fair share" approach to be explored with Working Group in the future
    - Constant mitigation rate for all sizes of warehousing projects based on emissions

# Warehouse CEQA Air Quality Mitigation Fund Regional Nexus Study Approach - Considerations

---

- Nexus approach requires all projects to participate - possible through a local ordinance
  - Projects with less than significant emissions would still be subject to fee
- Fee could be tailored to each jurisdiction
- 'Nexus' may not continue to apply at a regional level if program is strictly voluntary for a project



# Topics for Group Discussion

---

- What do local governments need if they are going to participate in this program?
- Spending priorities - regional vs. local, emissions reduction projects vs. other air quality projects
- Is a less than significant regional AQ impact an appropriate motivation to take advantage of this program? Are there other motivations that should be considered?

# Next Steps

---

- SCAQMD staff site visits
- Continue Working Group meetings
  - CEQA Air Quality Mitigation Fund Subgroup - August 23
  - Full Warehouse Working Group - September XX
- RFP for Economic Impact Study of Warehouse ISR
  - Governing Board - September 7, 2018
- Warehouse Facility Based Measures Status Update
  - Governing Board - November 2, 2018

# SCAQMD Staff Contacts

---

- Warehouses & Rail Yards - Ian MacMillan (909) 396-3244 [imacmillan@aqmd.gov](mailto:imacmillan@aqmd.gov)
  - Elaine Shen (909) 396-2715 [eshen@aqmd.gov](mailto:eshen@aqmd.gov)
  - Maryam Hajbabaei (909) 396-2341 [mhajbabaei@aqmd.gov](mailto:mhajbabaei@aqmd.gov)
  - Michael Laybourn (909) 396-3066 [mlaybourn@aqmd.gov](mailto:mlaybourn@aqmd.gov)
- Ports & Airports - Zorik Pirveysian (909) 396-2431 [zpirveysian@aqmd.gov](mailto:zpirveysian@aqmd.gov)
- New/Redevelopment - Jillian Wong (909) 396-3176 [jwong1@aqmd.gov](mailto:jwong1@aqmd.gov)