

Warehouse Indirect Source Rule



Working Group Meeting
October 24, 2018

FBMSM

Agenda

- Introductions (*5 min*)
- Summary of Recent Activities (*5 min*)
- Warehouse Business Models (*30 min*)
- Menu of Options for Potential Warehouse ISR (*30 min*)
- Update on Warehouse Economic Study (*30 min*)
- Next Steps and Wrap-Up (*5 min*)

Summary of Recent Activities

- Staff activities since August working group meeting:
 - Community outreach: CCAEJ, Sierra Club, etc. - community tour
 - Industry outreach: warehouse operations, BCOs, trucking companies
 - Public agency outreach: CARB, SCAG, local utilities
- Status update to the SCAQMD Governing Board - September 7th
- RFP for Warehouse Economic Study released September 7th
 - 2 proposals received by deadline on October 9th

Simplified Warehouse Business Models

- Next slides reflect staff's current understanding after discussions with industry stakeholders
- Simplified relationships are presented considering how a potential indirect source rule may apply to various warehouse industry participants
 - Logistics industry is substantially more dynamic and complex than shown on following slides
 - Additional complexities of these business relationships will continue to be explored with stakeholders during rulemaking
- Current preliminary ISR regulatory concepts include potential requirements addressing cleaner trucks and onsite infrastructure

Key Warehousing Terms

Beneficial Cargo Owner (BCO)

- The owner of the goods being shipped

Carrier

- Provides transportation services and operates transportation equipment (e.g., truckers, rail, shipping lines, airlines, etc.)

Shipper

- Contracts with the carrier for transportation of goods, may be the BCO or another entity such as a freight forwarder

Third-Party Logistics (3PL) Provider

- Provides clients with logistics service(s), such as warehouse management, distribution, etc.

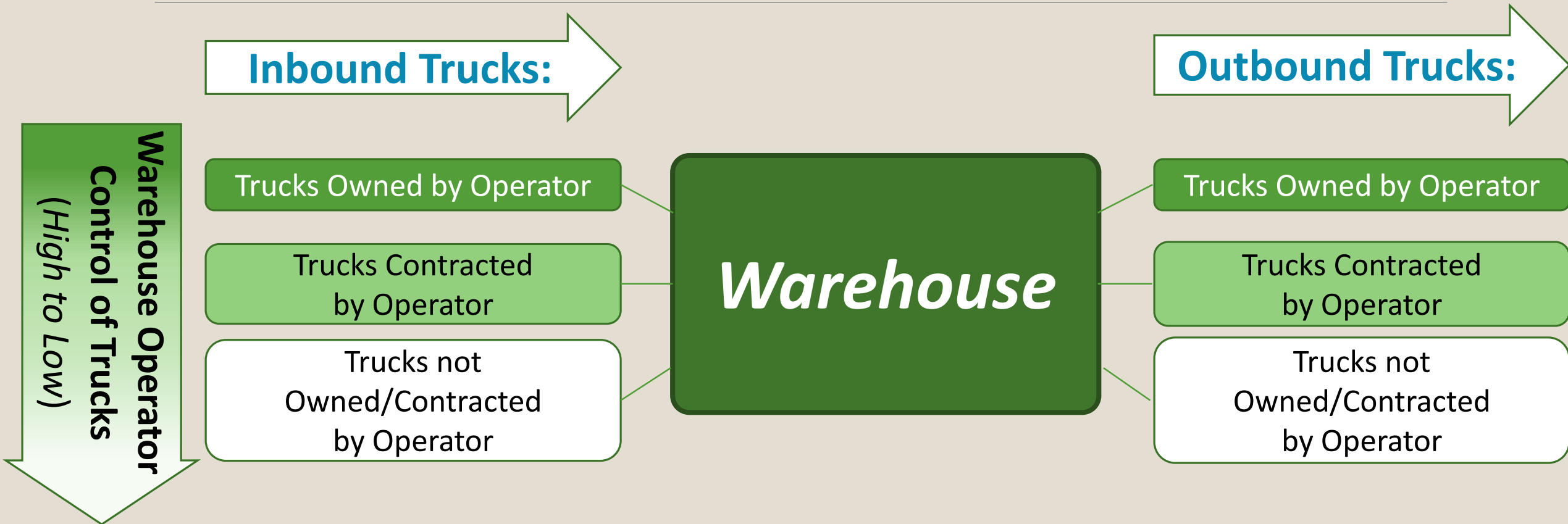
Warehouse Owner

- Warehouse building owner – typically a real estate developer, an investor, a 3PL, a BCO, or some combination of these

Warehouse Operator

- Entity operating the warehouse – could be a BCO, a 3PL, or multiple 3PLs

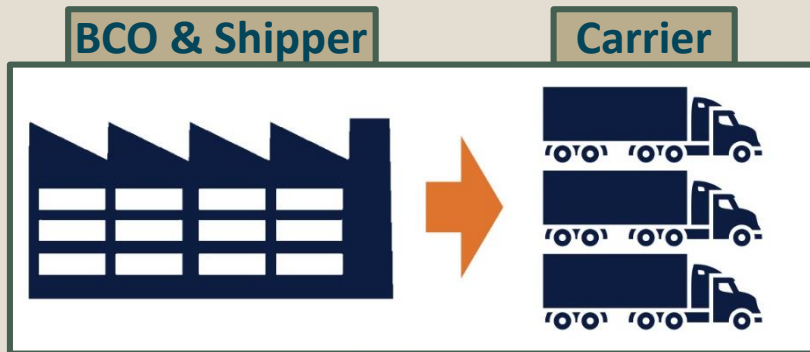
Warehouse Operator / Motor Carrier Simplified Relationships



➤ *Any combination of inbound trucks and outbound trucks is possible*

Motor Carrier Contracts

- If a BCO needs to move goods without using its own trucks, it will contract with a motor carrier



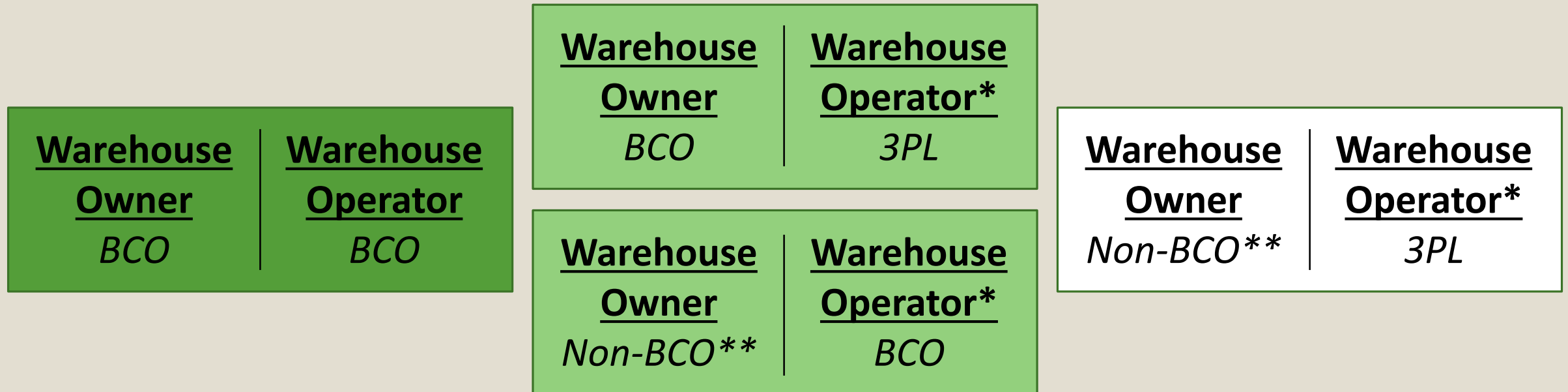
- BCO may contract with a central intermediary (broker) who will then contract with one or more motor carriers
- Contract requirements between a BCO and an intermediary can 'flow down' into the contracts between the intermediary and the motor carrier



Motor Carrier Contract Requirements

- Typical key provisions in contracts include:
 - Duration of contract (e.g., one year)
 - Carrier must operate in compliance with federal/state/local laws
 - Rates based on specific needs for each load
 - Cold storage, fuel surcharge, congestion pricing, etc.
- Examples:
 - American Trucking Association https://www.trucking.org/Carrier_Shipper_Agreements.aspx
 - Transportation Intermediaries Association model contracts for Shippers/Brokers and Brokers/Carriers include California-specific provisions
(Available to TIA members here: www.tianet.org)
 - EPA SmartWay <https://www.epa.gov/smartway>

Warehouse Owner/Operator Simplified Relationships



Beneficial Cargo Owner Control of Warehouses
(High to Low)

*The warehouse operator may or may not lease the building from the owner

** Non-BCO can include 3PLs, investors, real-estate developers, etc.

Discussion

- What additional aspects of the business models should staff consider for the following?
 - Warehouse owners/operators
 - Warehouse operators/motor carriers
- Who should staff reach out to in order to learn more?

Menu of Potential ISR Compliance Options

Facility Caps

- XX% below baseline emissions (*SJVAPCD approach*)
- <XX pounds of emissions per day per facility
- <XX pounds of emissions per goods throughput unit

SOON Program Approach

- 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

- Local govt. 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

- Clean fleets generate credits managed through a bank and ISR facilities must obtain and retire credit
- Potential for localized overlay

Voluntary Fleet Certification Program

- 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

- Utilize ZE/NZE equipment onsite
- ZE/NZE fueling/charging infrastructure
- Solar/energy storage

Mitigation Fee

- Pay a mitigation fee if other compliance options not chosen
- Collected funds are used to incentivize ZE/NZE equipment

ISR Compliance Options

Preliminary Evaluation

Facility Cap (XX% below baseline)

- Facility has flexibility to determine how to reduce emissions
- Successfully used in SJVAPCD for new construction
- Administratively burdensome to facility and air district

Facility Cap (<XX lbs/day)

- Facility has flexibility to determine how to reduce emissions
- Administratively burdensome to facility and air district
- Disproportionately affects larger operations

Facility Cap (<XX lbs/throughput unit)

- Encourages efficiency
- Administratively burdensome to facility and air district
- Difficult to track

ISR Compliance Options

Preliminary Evaluation (continued)

SOON Program

- Allows use of incentive funds for rule compliance
- Emission reductions bounded by the level of incentive funding
- Potential to increase the match required to receive incentive funding

Local Government Measure

- Allows local governments to tailor emission reduction strategies to local needs
- Joint federal/local authority may provide additional flexibility
- Potential uncertainty in implementation by local authorities

Crediting/Banking

- Provides facilities more flexibility to comply
- Administratively burdensome on facility and air district
- Emission reductions achieved through ISR may occur far from facility
- Potentially addressable through localized overlay

ISR Compliance Options

Preliminary Evaluation (continued)

Voluntary Fleet Certification

- Allows use of incentive funds for rule compliance
- Potential automation can ease administrative burden on facilities, carriers, and air district
- Can be tied to air district incentive program administration to facilitate SIP credit

Onsite Best Management Practice

- Facilitates other emissions reduction measures
- May not always provide SIP creditable emissions reductions on its own

Mitigation Fee

- When used as an option, provides compliance flexibility
- New source of revenue to incentivize cleaner technologies
- May not always be most cost-effective way to introduce clean technologies

Discussion

- From your group's perspective, what are the two most important things you would want to see in a warehouse ISR?
- Are there any other potential compliance options staff should consider?
- Which option(s) have the potential to provide the most feasible compliance pathway while leading to meaningful emission reductions?

RFP for Economic Impact of Warehouse ISR



- Study Goals
 - Classify the region's warehouses by operation type
 - Evaluate economic impacts based on classified warehouse types and hypothetical rule compliance scenarios
 - Scenarios to be developed with working group
 - Assess potential for cargo diversion to adjacent regions by industry type
- Proposal review panel
 - SCAQMD, SCAG, CARB staff reviewing proposals
 - 3rd party reviewer of study to be selected in 2019

Concurrent Research Efforts



- Ports' Clean Truck Program Fee Rate Study
 - Evaluate fee scenarios and potential impact on cargo diversion from the Ports
 - Scope of work under preparation by Ports' consultant
- SCAQMD-funded Commercial Zero Emission Vehicle (ComZev) Assessment
 - Estimate total cost of ownership and payback period for specific vocations for NZE/ZE technologies
 - Estimate incentive impact on NZE/ZE adoption in CA
- SCAQMD-funded study on Economic Impacts of Accelerated Deployment of ZE/NZE technologies in the HDV Sector
 - Quantify nationwide economic impacts & benefits (e.g., vehicle manufacturing) based on multiple ZE/NZE deployment scenarios
- Upcoming socioeconomic assessment for ISR
 - Evaluates potential costs of rule to industry, potential health benefits to the region, and regional jobs and other macroeconomic impacts

Warehouse Economic Study Scenario Building

Preliminary Scenario Building Approach

- Range of Potential Fleet Turnover
 - e.g., beyond current regulation
- Vehicle Technologies
 - e.g., Natural Gas, Electric, Hybrid, Others
- Technology Costs
 - Purchase and total cost of ownership
- Potentially regulatory mechanisms
 - e.g., Fleet certification, crediting/banking, etc.

Inputs to be Provided to Contractor

Study Results

- How different types of motor carriers and warehouses will be impacted
- How warehouse growth in the region will be impacted
- How goods movement modes may shift in response to ISR
 - e.g., truck to rail, etc.

Discussion

- What are some important considerations for what should go into the scenarios that the contractor will evaluate?
 - (e.g., costs to different segments of the trucking industry, costs for certain rule compliance options, specific breakdowns of warehouse type, etc.)
- What publicly accessible data or other research work can/should be used to inform the warehouse economic study?

Next Steps

- Continuing outreach to communities and industry
- Next Warehouse Working Group Meeting
 - Tentatively scheduling November 29th
 - Hypothetical rule scenarios to be further developed with Working Group
- Next steps for awarding contract
 - Review proposals
 - Mobile Source, November 16, 2018
 - Governing Board, December 7, 2018

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