

# Warehouse ISR: Bringing A Proven Pollution Reduction Solution to Colorado

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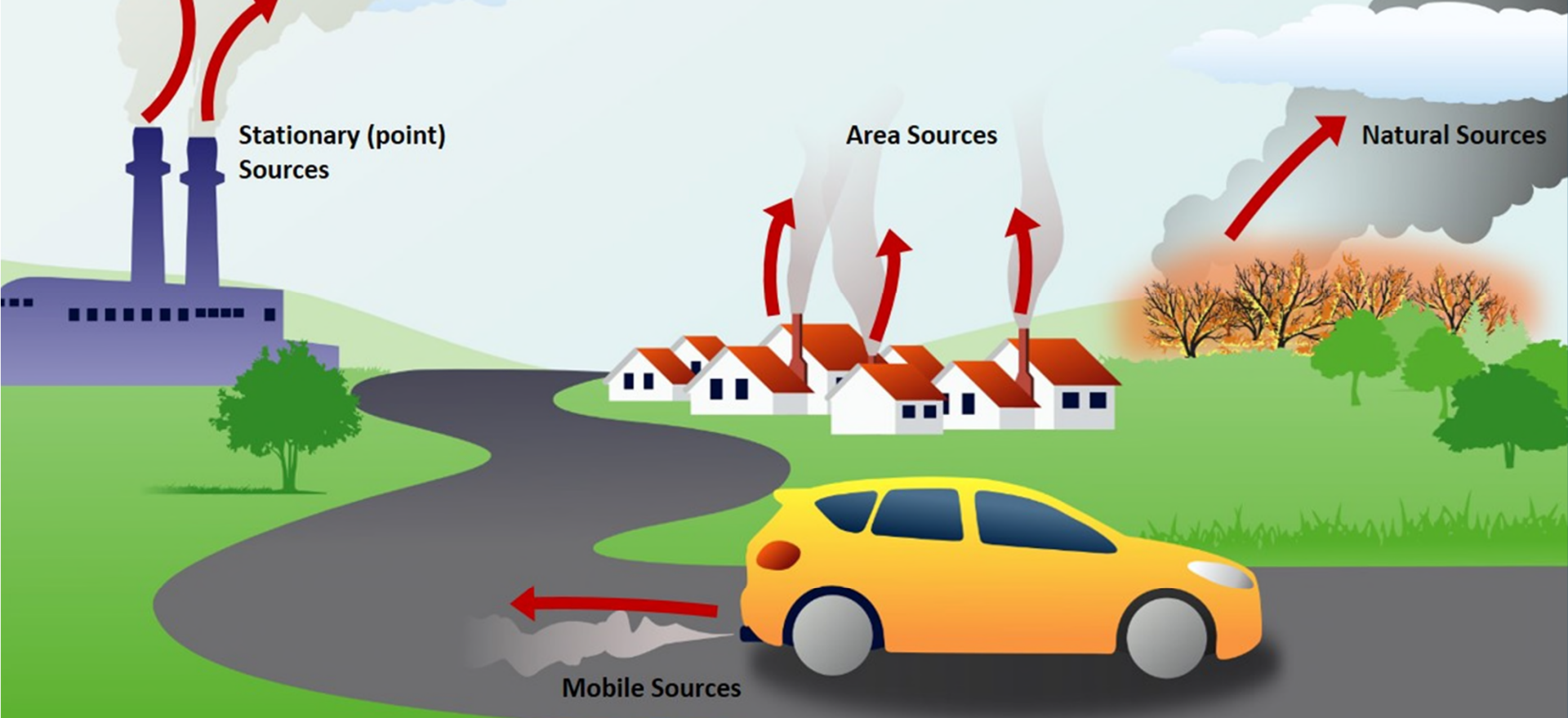
**EARTHJUSTICE**

# Agenda

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1. Indirect Source Rule Overview
2. Warehouse Impacts in Colorado
3. Case Study: South Coast Warehouse Rule
4. Actions in Other Jurisdictions
5. Conclusions

# Indirect Source Rule Overview



**Indirect source:** “a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution.” 42 U.S.C. 7410(a)(5)(c)

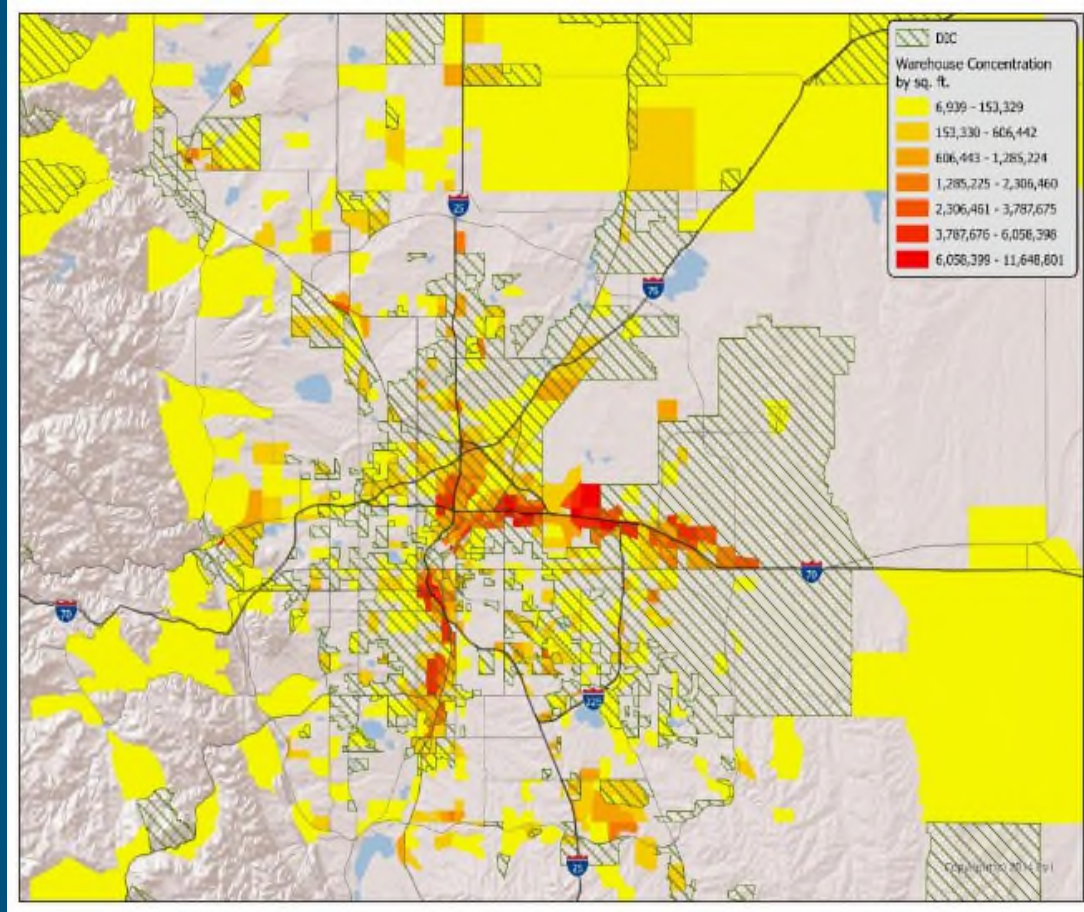


## Examples of Indirect Sources

- Airports
- Marine Ports
- Railyards
- Warehouses
- New/Redevelopment

# Warehouse Impacts in Colorado

# Warehouse Facilities in DICs (2021)



Ava Farouche, Earthjustice.

# Equity Impacts: Location of Warehouse Sq Footage

## 2021

- 38% in Housing Burdened Communities
- 47% in Communities of Color
- 34% in Low Income Communities



## 2030 Projections

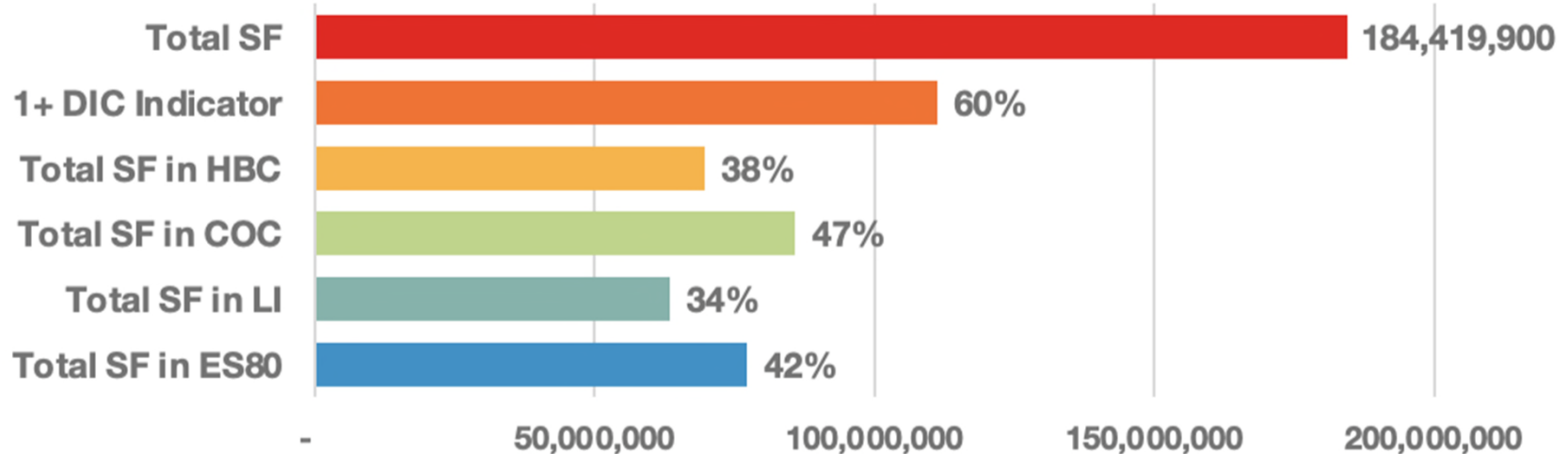
- 34% in Housing Burdened Communities
- 61% in Communities of Color
- 32% in Low Income Communities

60% in a DIC



# Equity Impacts: 2021 Location of Warehouse Sq. Footage

Figure 16. Existing (2021) Industrial – Warehouse SF in DICs



RAQC's Indirect Source Market Study: Felsburg Holt & Ullevig, Equity Analysis of Indirect Sources – Colorado Indirect Source Market Study, June 2023, Figure 16.

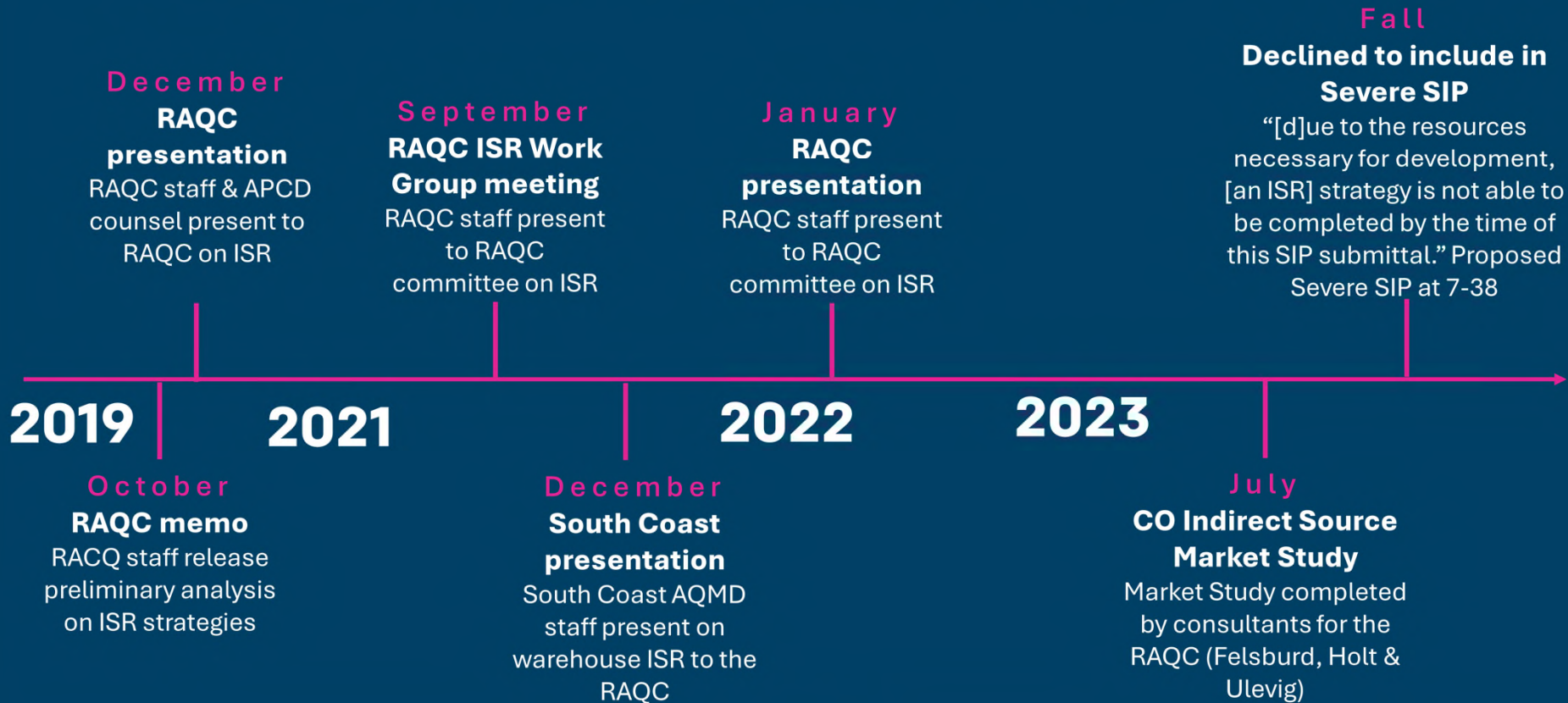
# Equity Impacts: 2030 and 2040 Projections

Table 7. Existing (2021) & Projected Industrial – Warehousing SF in DICs

Time Period	SF	Housing Cost Burdened		Communities of Color		Low Income Communities		EnviroScreen Score 80+	
		SF	%	SF	%	SF	%	SF	%
2021	184,419,900	69,593,700	38%	85,824,600	47%	63,287,000	34%	77,182,100	42%
2030	200,863,700	68,833,200	34%	121,967,600	61%	63,770,800	32%	79,441,600	40%
2040	224,518,700	76,967,900	34%	134,238,600	60%	71,568,700	32%	89,276,100	40%
Net 2021-2040	40,098,800	7,374,200	18%	48,414,000	121%	8,281,700	21%	12,094,000	30%



# TIMELINE: ISR Consideration in Colorado



# Case Study: South Coast Warehouse Rule

# The Promise of a Warehouse ISR

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- Emission reductions: a comprehensive approach to warehouse pollution
- Catalyze infrastructure
- Transition to clean trucks future
- Improve reporting
- Enforceable

# Points-Based System

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- Covers new & existing warehouses over 100,000 square feet
- Requires reporting of operations and truck trip data
- Menu of Compliance options, including:
  - Installing ZE infrastructure (charging stations)
  - # of ZE truck trips to and from warehouse
  - Installing solar panels
  - Installing air filters in nearby schools, homes
  - Mitigation fee
  - Custom plan

# SCAQMD Data: 2021 - 2023

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# Successes: South Coast Warehouse Rule



**1.2 ton/day**

NOx Reductions



**.038 ton/day**

DPM Reductions



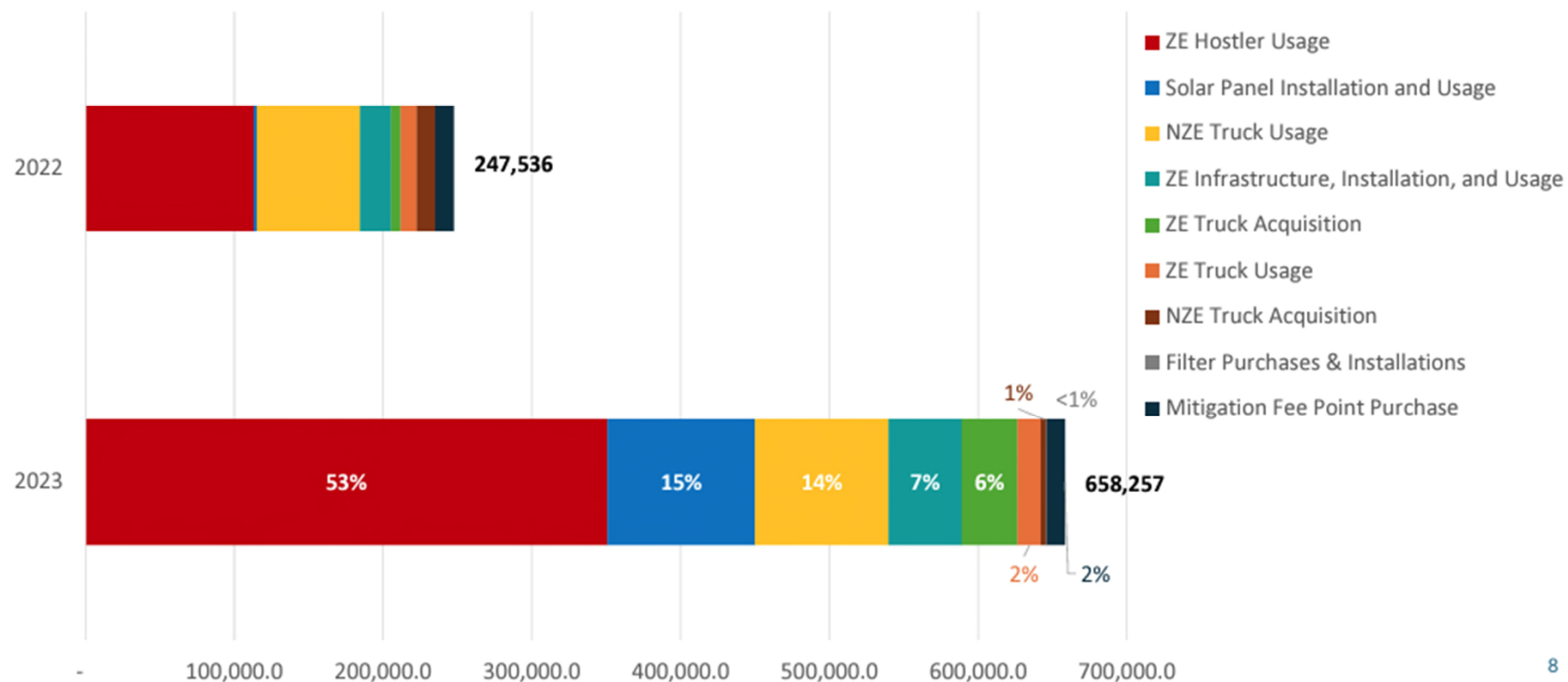
**\$29.3 million**

Mitigation fees reported  
to date (2021-July 31,  
2024)





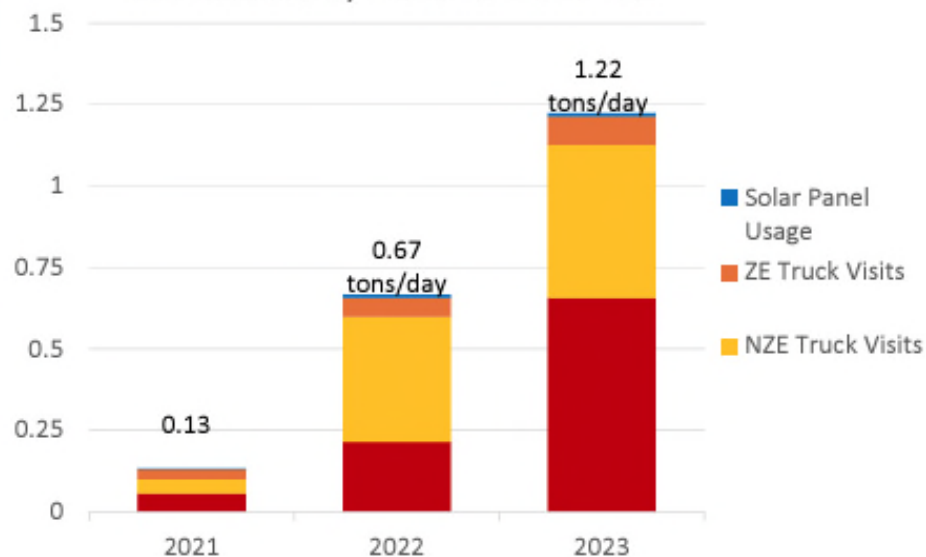
# Reported Total WAIRE Points By Year



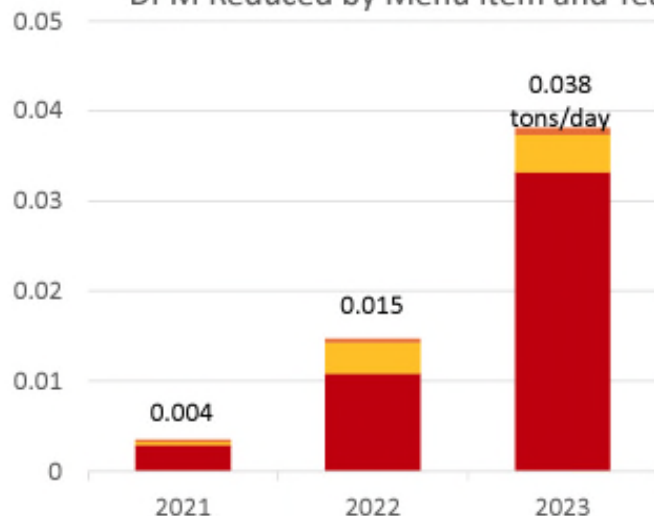
\*Based on reported information; subject to audit by South Coast AQMD.

# Emission Reductions From Reported Actions\*

NOx Reduced by Menu Item and Year



DPM Reduced by Menu Item and Year



NOx and DPM emission reductions are within range of estimated benefits<sup>1</sup>

<sup>1</sup> Based on [Final Staff Report \(Attachment 1\)](#)

\*Unaudited results shown

Estimated NOx Reduction: 1.5 to 3 tons per day

Estimated DPM Reduction: 0.005 to 0.02 ton per day

# Benefits of South Coast Rule

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- Provides flexible set of options to comply
- Reduces local and regional emissions associated with warehouses
- Collects key information about warehouses
- Contributes to the clean energy economy
- Generates revenue for further pollution reduction measures

# Action in Other Jurisdictions

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## Legislative Efforts

- New York Clean Deliveries Act
- New Jersey SB 3546/A4679

## Regulatory Efforts

- San Diego APCD
- Bay Area Air Quality Management District
- City of New York

# Conclusions

# Critical Elements of Warehouse ISR

## Facility by Facility Review

- Applies to new and existing warehouses.

## Air Emissions Reduction Plan

- Based largely on SCAQMD framework.
- Enhanced mitigation in DICs

## Permit for New Warehouses

- Will not contribute to air quality violation.
- Will ensure public participation requirements apply.

## Transparency

- Annual reporting on trucks, emissions, charging data, etc.

## Enforceability

- Voluntary commitments are insufficient to assure reductions & include in State Implementation Plan

# Contact Information

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# Thank You!