

# Carpenter Co.

## AB 2588 Public Meeting

### South Coast Air Quality Management District

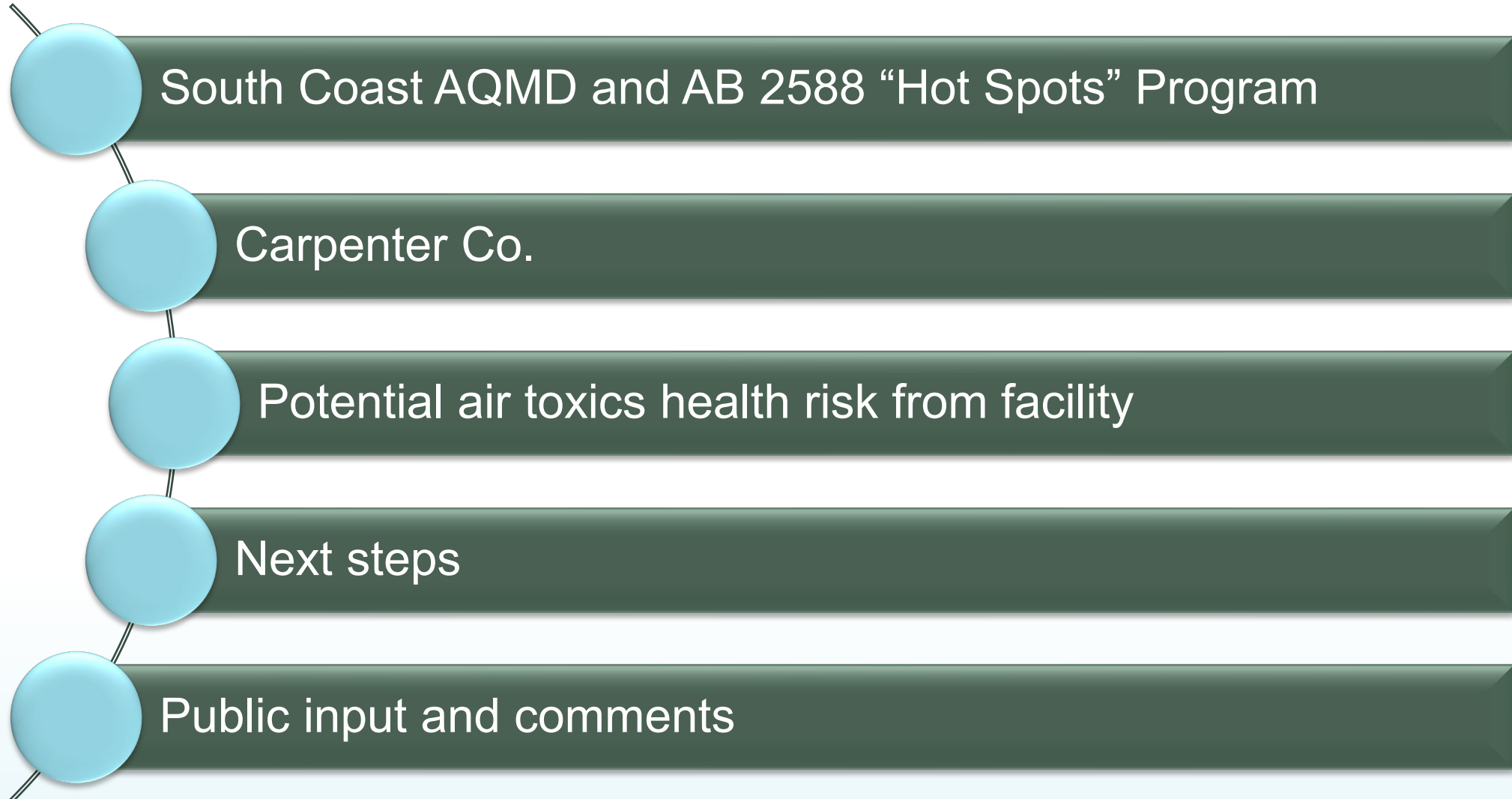
April 25, 2024



# Meeting Agenda

Welcome	Sarah Rees, Ph. D. Deputy Executive Officer Planning, Rule Development and Implementation, South Coast AQMD
South Coast AQMD Presentation	Scott A. Epstein, Ph.D. Planning and Rules Manager Planning, Rule Development and Implementation, South Coast AQMD  Vanessa Tanik Air Quality Specialist Planning, Rule Development and Implementation, South Coast AQMD
Public Question/Comment	Sarah Rees, Ph. D. Deputy Executive Officer Planning, Rule Development and Implementation, South Coast AQMD

# Purpose of Meeting

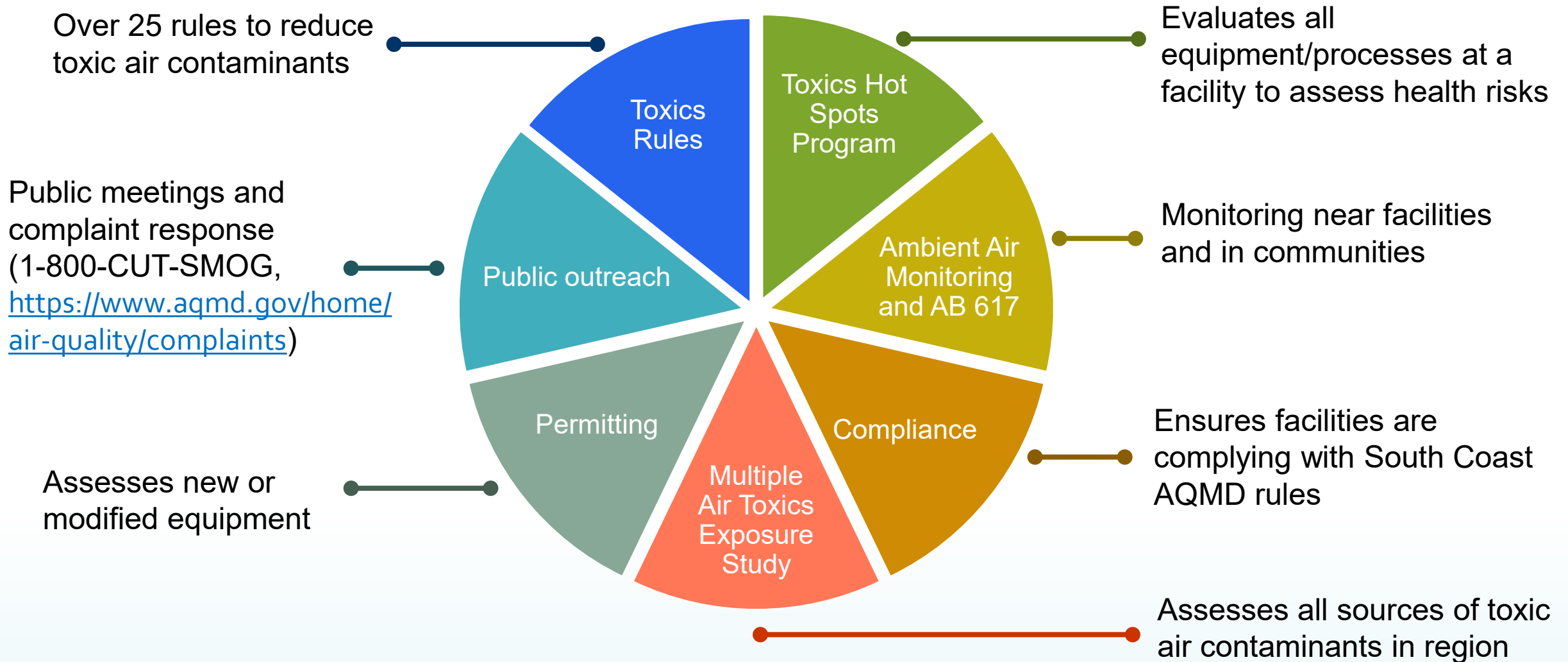


# South Coast Air Quality Management District

- Multi-County Air Pollution Control Agency
- Governed by 13-member Board of local elected and appointed officials
- 17 million people
- ~28,000 permitted sources



# South Coast AQMD's Air Toxics Program

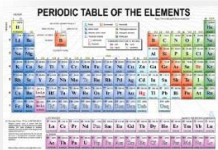


# The Air Toxics “Hot Spots” Information & Assessment Act (AB 2588)

- State law enacted in 1987
- Public **Right-to-Know** Program
- Purpose
  - Collect emissions data with updates every 4 years
  - Identify facilities having localized impacts
  - **Evaluate potential health risks through Health Risk Assessments**
  - Notify residents of those potential health risks, if above South Coast AQMD notification thresholds
  - Reduce health risks below certain thresholds, if above South Coast AQMD risk reduction thresholds
- Rule 1402
  - Implements requirements of AB 2588
  - More stringent requirements for reducing health risk

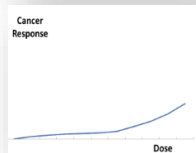
# About Health Risk Assessments (HRA)

- Estimates chance a person will experience a health effect from a toxic air contaminant
- Based on a "snapshot" of emissions from an inventory year
- Conservatively assumes person is outdoors in one location 24 hours/day and 7 days/week
- HRA process estimates potential health risk\* and involves:



## Hazard Identification

Identifies health problems and potency of toxic air contaminants



## Dose-Response

Accounts for the increased chances of having health effects when pollutant levels are higher



## Exposure

Estimates the amount of time a person could be exposed to toxic air contaminants

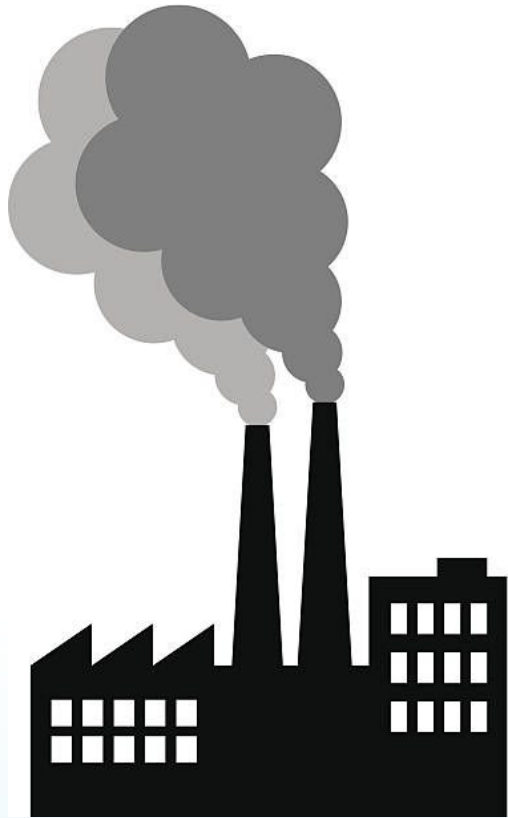


## Sensitivity

Accounts for children being more sensitive to the health effects of air toxics

\* Uses methodology established by the California Office of Environmental Health Hazard Assessment

# Key Elements of HRAs



*Contact*



*Ingestion*



*Inhalation*

## Cancer Risk

- Estimates the probability of a cancer case
- Expressed in “Chances in one million”
- Number of excess cancer cases in a population expressed as a Cancer Burden

## Non-Cancer Risk

- Estimates non-cancer health effects
- Acute non-cancer effects are from short-term exposure
- Chronic non-cancer effects are from long-term exposure
- Expressed using a Hazard Index (HI)



# Rule 1402 Health Risk Thresholds

## Cancer Risk

(increased probability for cancer)

Significant Risk

Cancer Risk  $\geq 100$  in one million

Risk Reduction

Cancer Risk  $\geq 25$  in one million

Public Notification

Cancer Risk  $\geq 10$  in one million

## Cancer Burden

(increase in occurrence of cancer case in population)

Risk Reduction

Cancer Burden  $\geq 0.5$

## Non-Cancer Risk

(acute and chronic exposure)

Significant Risk

Non-Cancer Hazard Index  $\geq 5$

Risk Reduction

Non-Cancer Hazard Index  $\geq 3$

Public Notification

Non-Cancer Hazard Index  $\geq 1$

# Rule 1402 Risk Reduction Plans

**Risk Reduction Plan – Required if Risk  $\geq$  Risk Reduction Threshold**


- Permanent, verifiable, and enforceable risk reduction measures
- Must reduce the facility-wide health risk below 25 in-one-million for cancer risk and a Hazard Index of 3 for non-cancer health effects
- Must be implemented within 2.5 years from the approval of plan or sooner

# **Carpenter Co.**

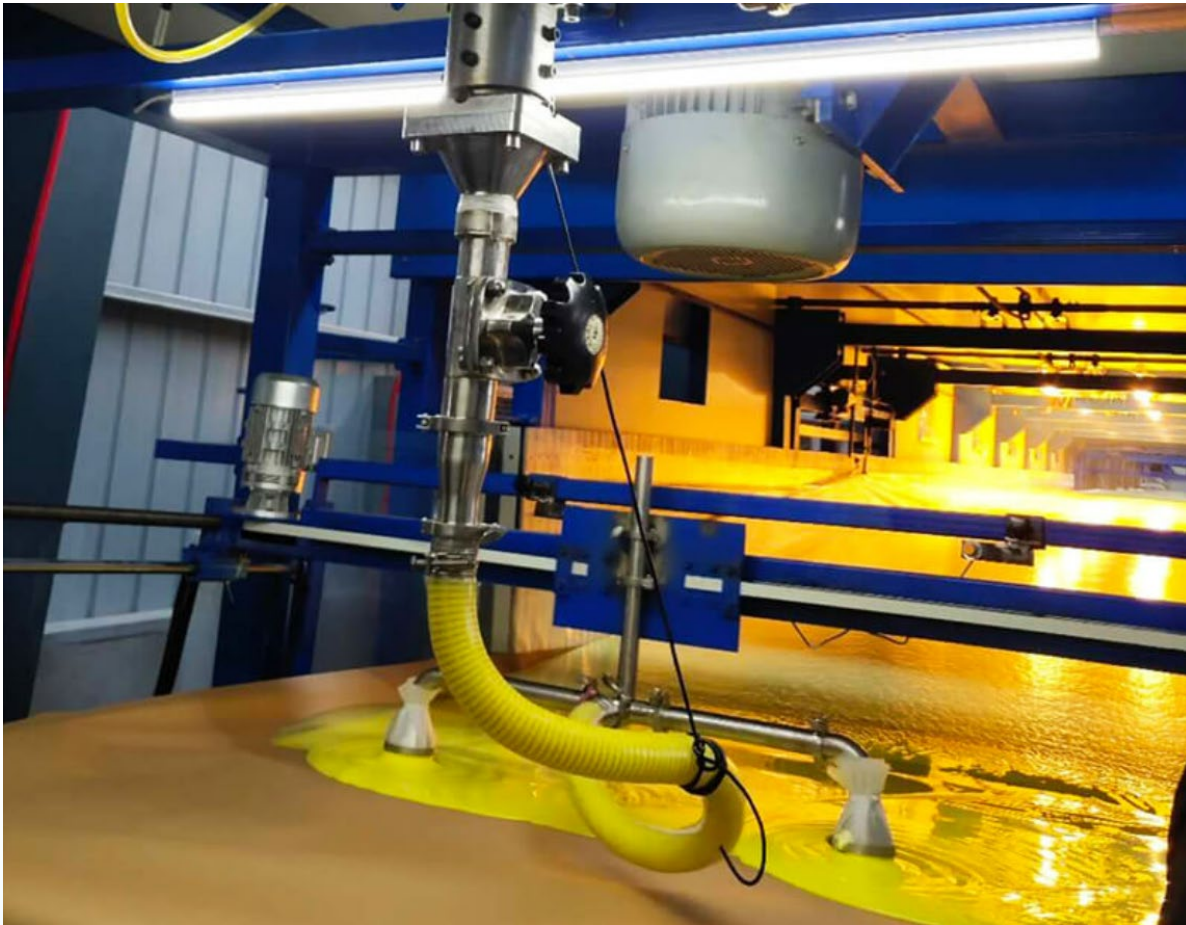
# Carpenter Co.

- Located at 7809 Lincoln Avenue in Riverside
- Manufactures flexible polyurethane foam products for use in furniture, carpet cushion underlayment, bedding, and other applications
- HRA required based on 2019 emissions



 Boundary of Carpenter

# Operations at Carpenter



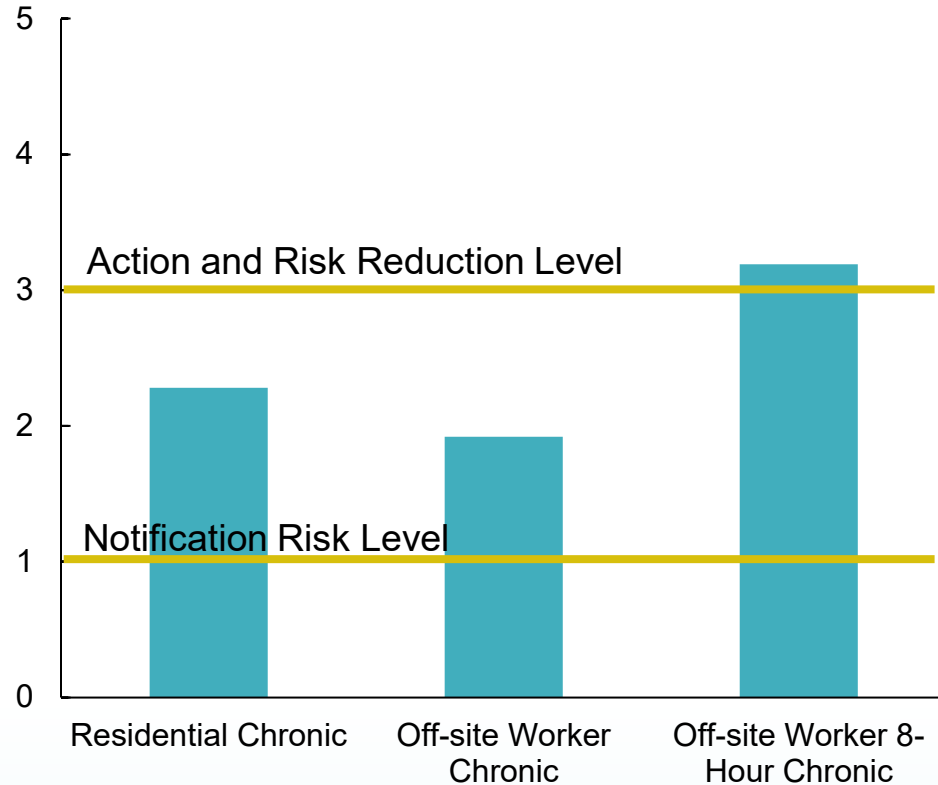
- Primary operations: polyurethane foam manufacturing and foam reprocessing
- Other equipment: Emergency fire pump engines, boilers, fabric/foam cutters, baghouses
- Main pollutant is toluene diisocyanate (TDI)
  - Primary source of TDI emissions is the Rebond Pour Line

\*\*Above picture is for illustration purposes only and is not an actual photo of processes at Carpenter Company

# Health Effects of Key Toxic Air Pollutant

Toxic Air Pollutant	Health Effect	
	Exposure	Potential Effects
Toluene Diisocyanate (TDI)	Short-Term	Acute impacts can include eye and throat irritation, swelling in the airways, and sudden asthma attacks even in people who don't usually have them.
	Long-Term	Repeated exposure can trigger the development of asthma, increased asthma reactions, and reduced lung function.

# Estimated Non-Cancer Risks - 2024 Approved HRA



**2024 Health Risk  
Assessment**

TDI emissions contribute 99.4% of the non-cancer risks. The main sources of non-cancer risks are from the following operations:

- Rebond Pour Line
- TDI Storage Tanks
- Prime Pour Line

# Worker and Residential Chronic Risk





# 8-Hour Chronic Risk



# Rule 1402 Public Notification

- Requirements when an approved HRA shows risk beyond the Public Notification Level:
  - Approved HRA is made available on website;
  - Distribute the Public Notification Materials; and
  - Participate in a Public Meeting approved by South Coast AQMD (today)
- Carpenter Co. sent public notification to ~ 220 addresses

# Next Steps

## Risk Reduction Plan

Carpenter submits a Risk Reduction Plan by June 21, 2024

## RRP Review

South Coast AQMD staff reviews and approves the Risk Reduction Plan

## RRP Implementation

Risk Reduction Plan will be implemented as soon as feasible but no later than 2 ½ years from the approval date

# More Information on the AB 2588 Program

- South Coast AQMD AB 2588 Website
  - <http://www.aqmd.gov/ab2588>
- Link to the 2024 Conditionally Approved HRA
  - [www.aqmd.gov/docs/default-source/planning/risk-assessment/carpenter-co/carpenter-hra-report.pdf](http://www.aqmd.gov/docs/default-source/planning/risk-assessment/carpenter-co/carpenter-hra-report.pdf)
- Email: [ab2588@aqmd.gov](mailto:ab2588@aqmd.gov)
- Hotline: 909-396-3616

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