

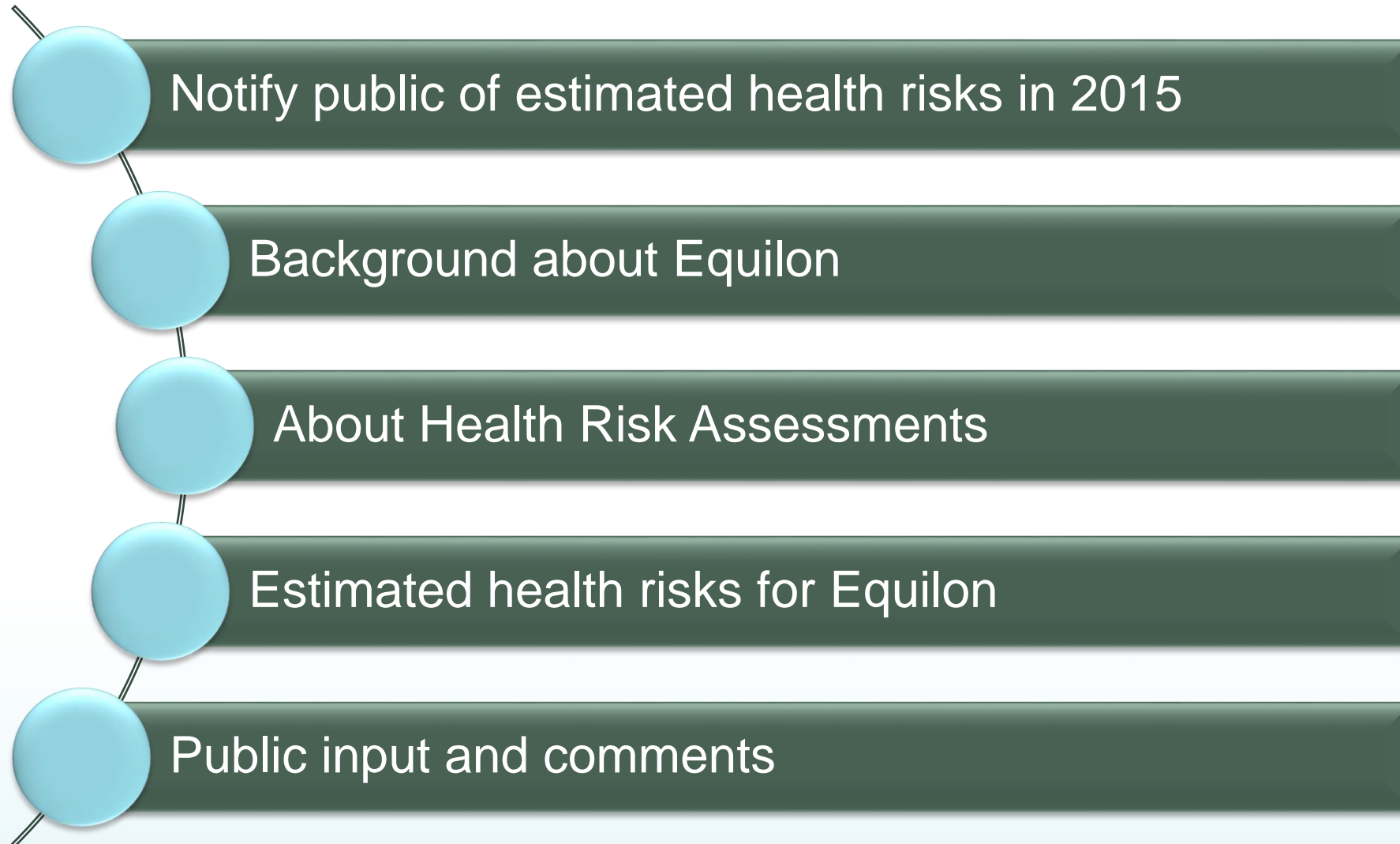
**Equilon Enterprises, LLC,  
Shell Oil Production, US (Equilon)  
AB 2588 Public Meeting**

**South Coast Air Quality Management District**

**July 22, 2020**



# Purpose of Meeting



# Who We Are

- **The South Coast AQMD is the regional agency responsible for air quality for areas in LA, Orange, Riverside and SB Counties**
  - Largest of the 35 local air agencies in CA
  - Work with CARB and EPA to meet state and federal standards
- **Responsibilities**
  - Control emissions from stationary sources (e.g., power plants)
  - Comply with U.S. government air quality standards
  - Permit and inspect 28,400 affected businesses
  - Administer \$100 million of incentive funding annually



# South Coast AQMD's Air Toxics Program

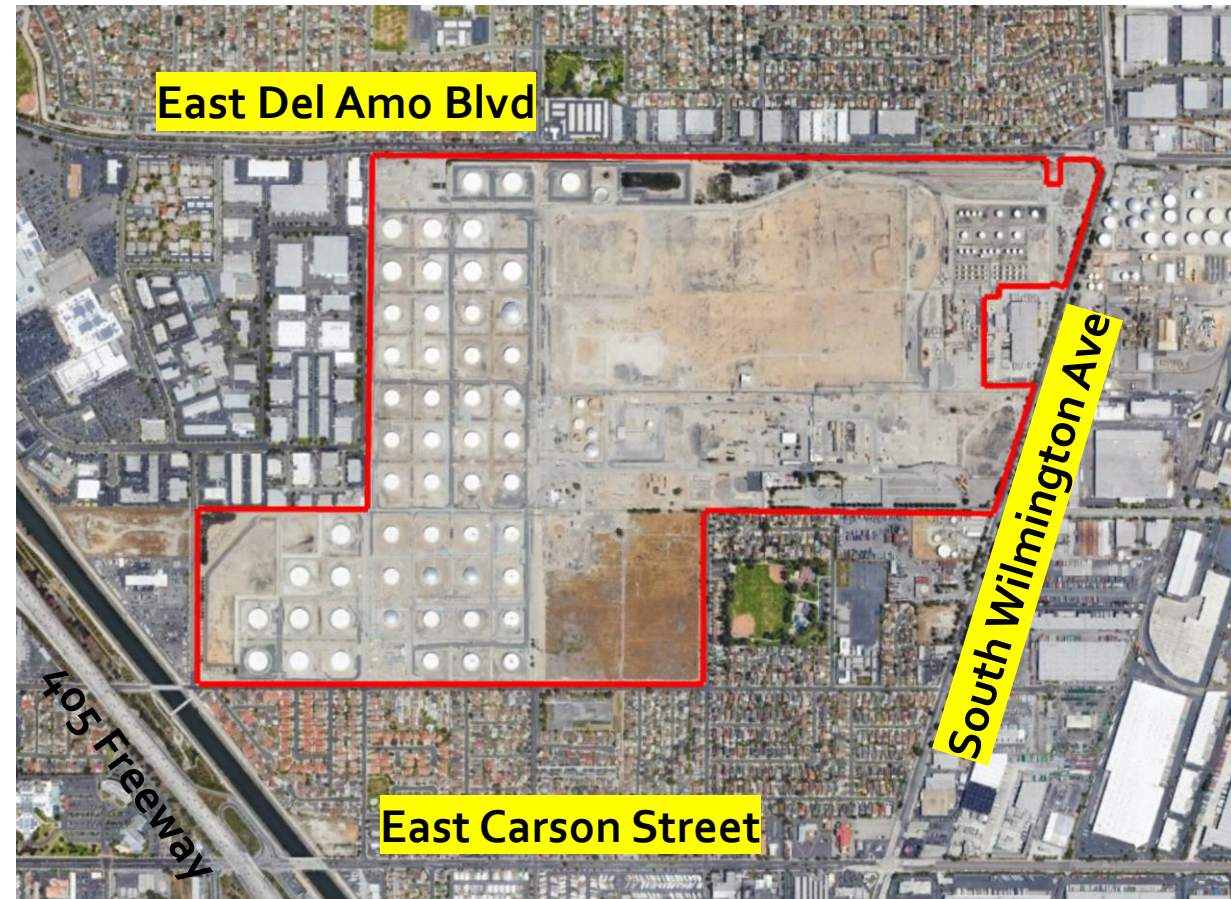


# The Air Toxics “Hot Spots” Information & Assessment Act (AB 2588)

- State law enacted in 1987 (Connelly)
- 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
  - Reduce health risks below certain thresholds
- Rule 1402
  - Implements requirements of AB 2588
  - More stringent requirements for reducing health risk

# Equilon

- Located at 20945 S. Wilmington Ave in Carson, CA.
- Bulk gasoline and chemical distribution terminal
- HRA required based on 2015 emissions



 Boundary of Equilon

# Operations at Equilon



- Primary sources of risk are from portable diesel-fired internal combustion engines and storage tanks
- Other emission sources include a soil vapor extraction system, bioreactor, wastewater treatment system, and truck load racks

# About Health Risk Assessments

Estimates the chance that a person may experience a health effect from toxic air contaminant emissions

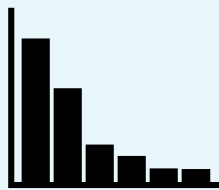


“Snapshot” based on toxic air contaminant emissions from one year of operation

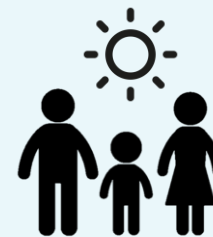
Assumes 2015 emissions levels for 30 years



Snapshot can change if toxic air contaminant emissions are reduced



Conservative assumptions - people are outdoors 24 hours, 7 days a week in one location





# 3 Key Health Risk Elements of Rule 1402

## Cancer Risk

- Estimates the increased probability for cancer
- Expressed in “Chances in a million”

## 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)

## Cancer Burden

- Estimates the increase in the occurrence of cancer cases in a population subject to a cancer risk of 1 in a million or greater
- Cancer burden  $\geq 0.5$  requires risk reduction

# Health Effects of Key Toxic Air Pollutants

Toxic Air Pollutant	Health Effect	
	Exposure	Potential Effects
Diesel Particulate Matter	Long-term	Cancer and non-cancer chronic effects on the respiratory system
Benzene	Short-term and Long-term	Cancer, non-cancer acute, non-cancer chronic, non-cancer chronic 8-hour effects on the human reproductive, blood, and immune systems

# Rule 1402 Health Risk Thresholds

## Cancer Risk Thresholds

Risk Reduction

Cancer Risk  $\geq 25$  in one million

Public Notification

Cancer Risk  $\geq 10$  in one million

## Non-Cancer Risk Thresholds

Risk Reduction

Non-Cancer HI  $\geq 3$

Public Notification

Non-Cancer HI  $\geq 1$

## Cancer Burden Threshold

Risk Reduction

Cancer Burden  $\geq 0.5$

# Cancer Risk Evaluations

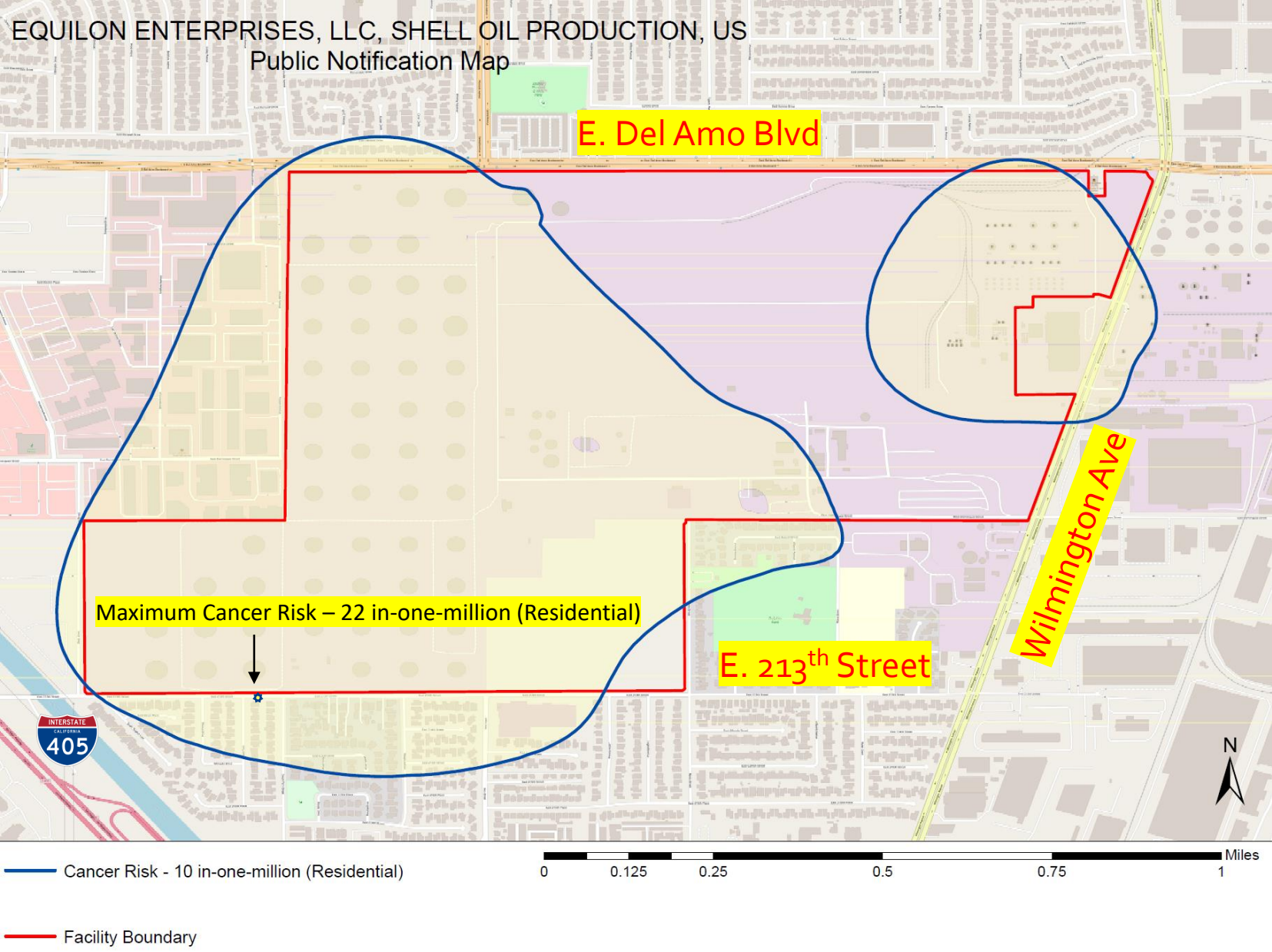
## Residential Receptor

- Continuous exposure for 30 years
- All age groups evaluated

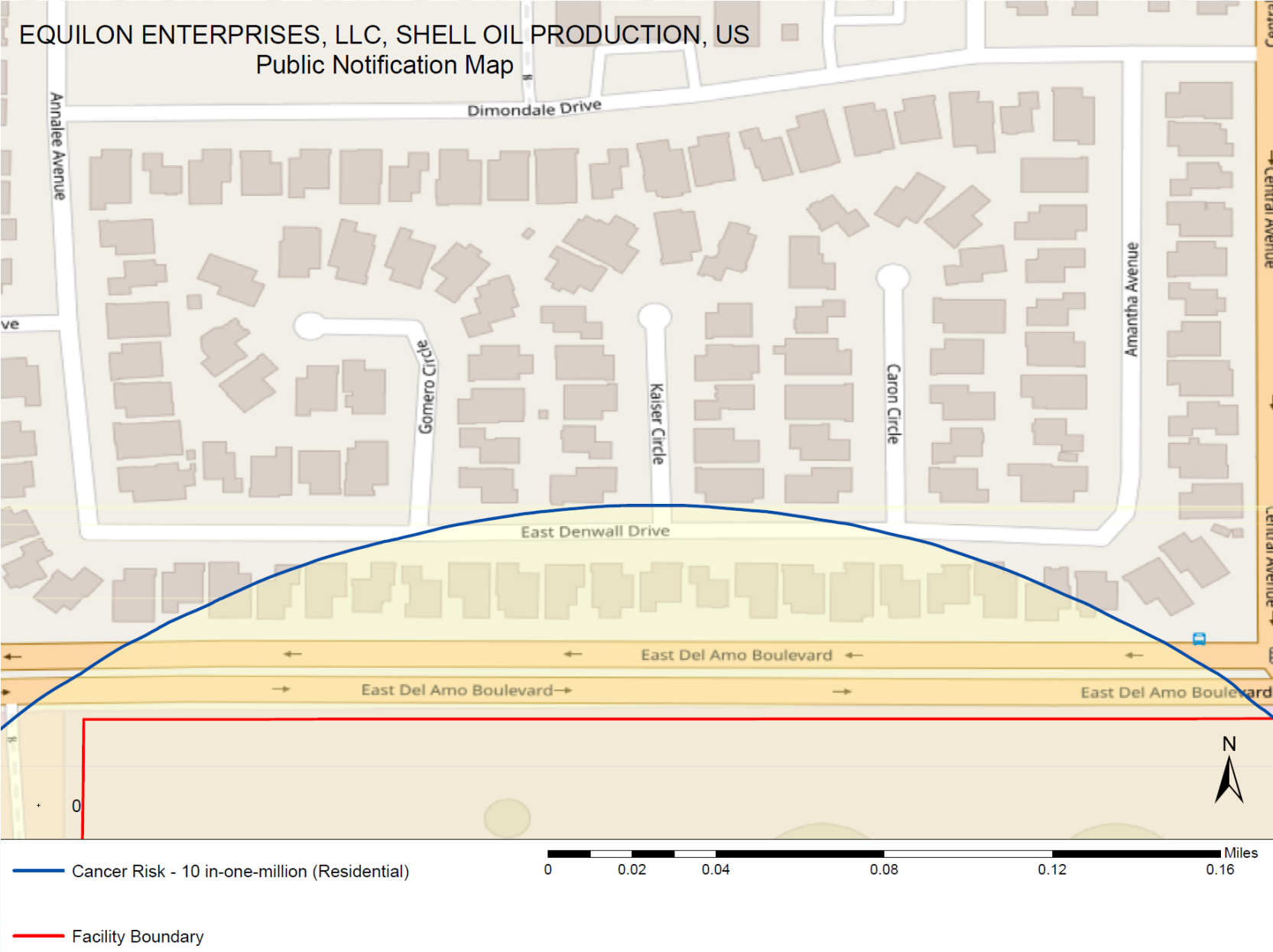
## Offsite Worker Receptor

- Exposure for 8 hours per day, 5 days per week for 25 years
- Adult age groups evaluated

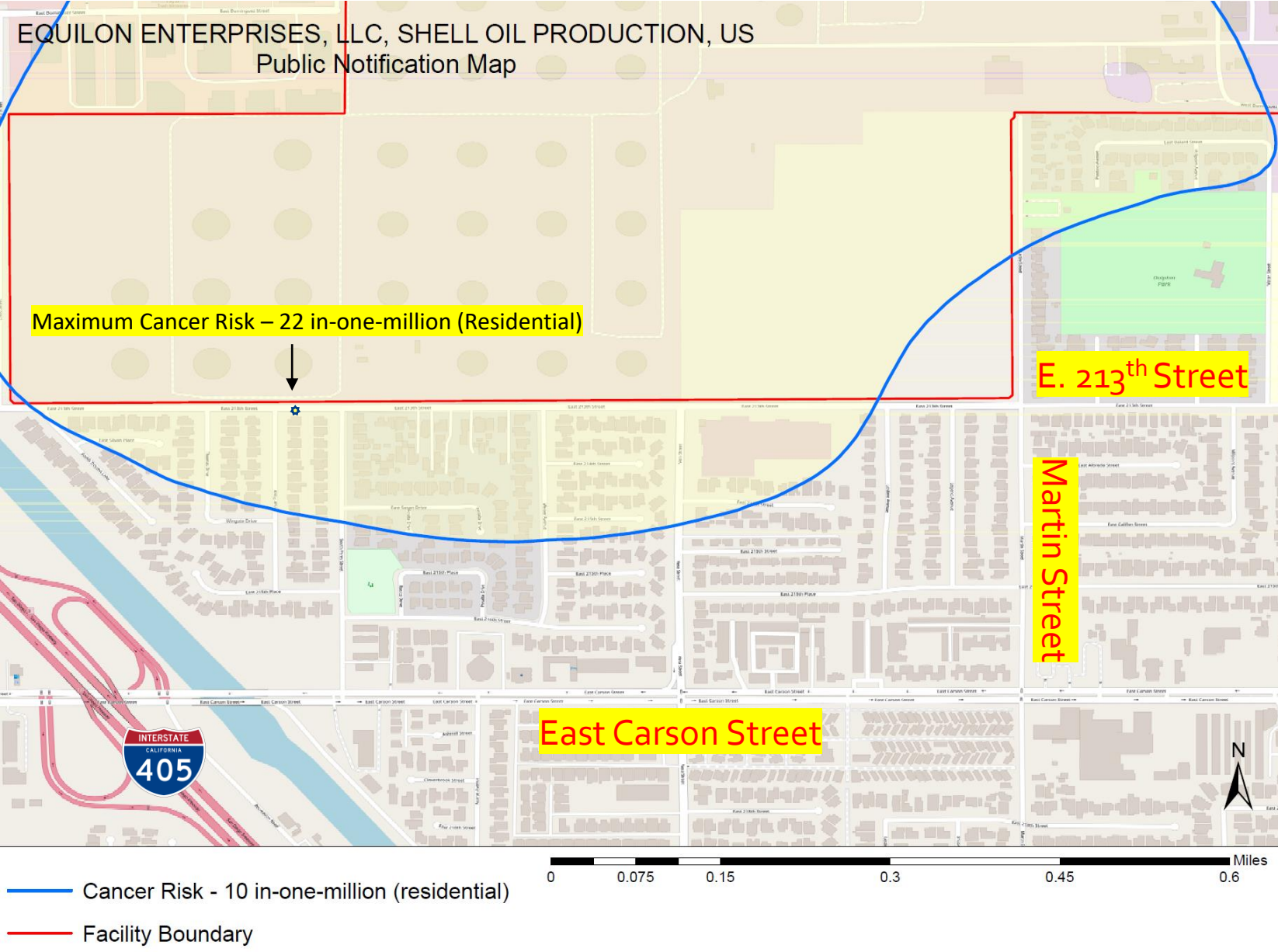
# Residential Cancer Risk – 2015 Emissions



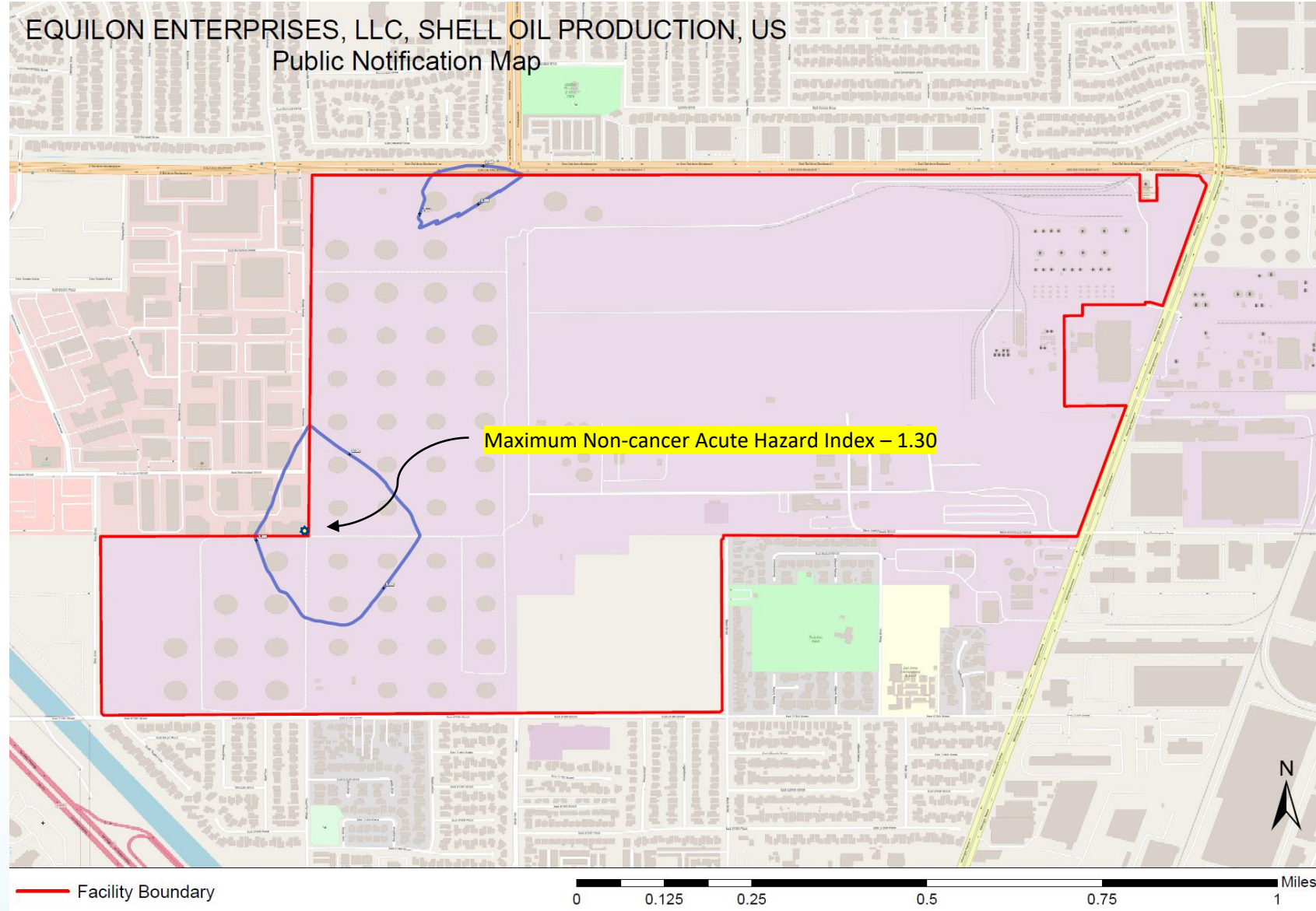
# Residential Cancer Risk – 2015 Emissions



# Residential Cancer Risk – 2015 Emissions

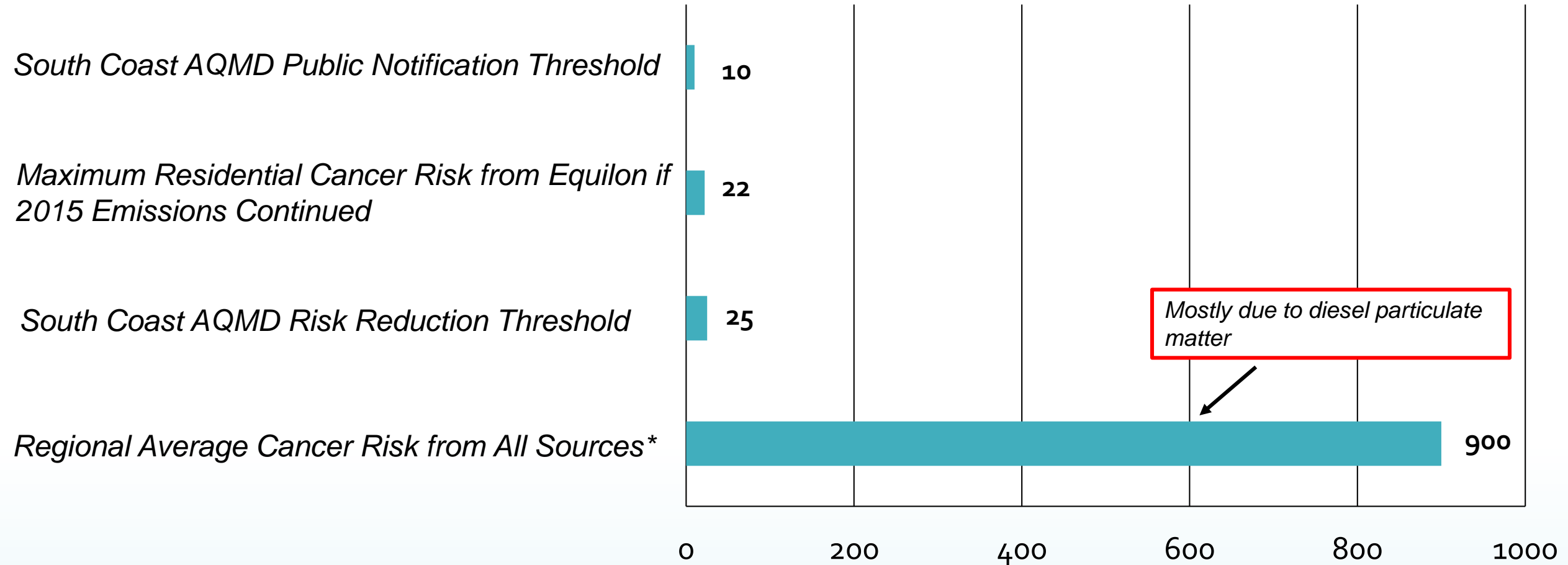


# Non-Cancer Acute Risk – 2015 Emissions





# Cancer Risk Context



\* Based on MATES IV study

# Public Notification Process

- AB 2588 Notification
  - Letter sent to ~200 addresses
  - Public meeting via Zoom

# More Information on the AB 2588 Program

- South Coast AQMD AB 2588 Website
  - <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>
- Link to the 2015 Approved HRA
  - <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/shell-carson-2015-hra.pdf>
- Email: [ab2588@aqmd.gov](mailto:ab2588@aqmd.gov)
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