### West Oakland Steering Committee Meeting

BAAQMD Technical Assessment Presentation October 3, 1018 Phil Martien, Ph.D.

Acting Director, Assessment, Inventory, & Modeling Division

### Candidate Actions



- BAAQMD & WOEIP will conduct assessments
- Successful actions will depend on broader participation

#### Assessment



- Assessment guides the selection of candidate actions
- Shaped by community knowledge and technical work

#### Assessment: Step-by-Step

- 1. Define local area boundaries
- 2. Identify pollutants
- 3. Identify all sources that impact area
- 4. Gather information about sources
- 5. Do the assessment
- 6. Evaluate results

#### 1a: Define boundary for local sources



- Propose boundary for sources
- All sources of pollution would be identified within "source" boundary

#### 1b: Define boundary for exposure



- Propose boundary for exposure
- All people exposed to pollution would be identified within the "receptor" boundary

#### 2: Identify pollutants



Particulate Matter

R.

#### **Toxic Air Contaminants**

# Black Carbon

The greatest health burden from air pollution is from particulate matter Diesel PM is a major concern in West Oakland and including toxics will allow us to estimate cancer risk Measurements are available in West Oakland and we can use these to compare with modeling results

#### 3a: Identify local sources





Port of Oakland

Trains Passenger and freight

#### Permitted stationary sources

Metal melters, scrap handlers, diesel engines, backup generators, boilers, and gas stations



*Trucks, ships, harbor craft, locomotives,* 

cargo-handling equipment, and other

off-road equipment

Cars and trucks

Freeways and surface streets



Truck-related businesses Distribution centers, parking, recyclers, scrap handlers



Ships, ferries, harbor craft

#### 3b: Add regional contribution



PM<sub>2.5</sub> (ug/m<sup>3</sup>) < 5.5

> 5.5 - 6.0 6.0 - 6.5 6.5 - 7.0 7.0 - 7.5 7.5 - 8.0 8.0 - 8.5 8.5 - 9.0 9.0 - 9.5 9.5 - 10.0 > 10.0

> > Modeling Source

Domain

Use regional model to determine how much air pollution comes into West Oakland from outside of local area

## **3c:** What local sources are we thinking will NOT be included



#### 4: Gather information about sources

- West Oakland Truck Traffic Survey
- Air Resources Board Camera Pilot Study
- Community Knowledge about Local Activity



#### 5: Do the Assessment

Assess local and regional sources, and contribution of each to air pollution exposure



#### 6: Evaluate results

## Other studies can be used to compare to modeling results



