

# Imperial County 2013 State Implementation Plan for the Federal PM<sub>2.5</sub> Standard

December 18, 2014

California Environmental Protection Agency

 **Air Resources Board**

# Overview

- \* Imperial County Air Quality
- \* Impact of International Emissions
- \* SIP Elements
- \* Improving Border Air Quality

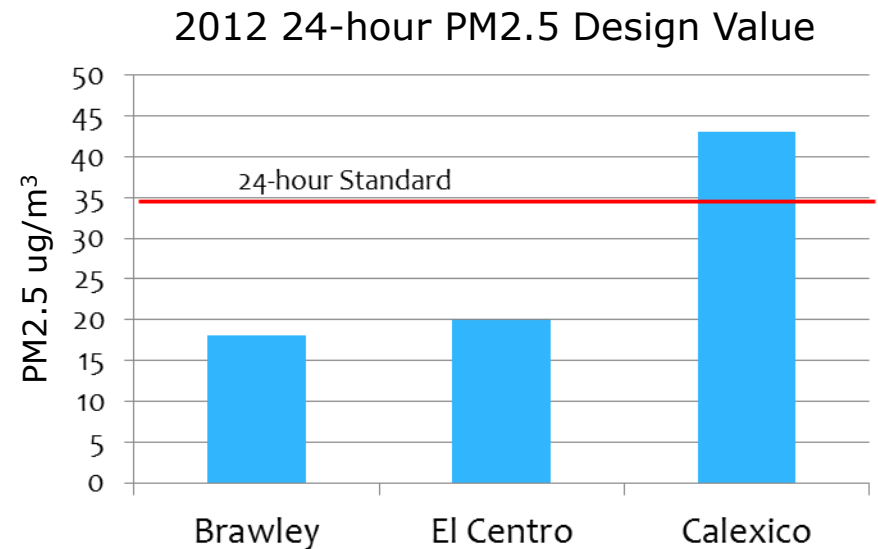
# Imperial County Nonattainment Area

- \* Portion of county nonattainment for 24-hour PM<sub>2.5</sub> standard
- \* Air quality challenges:
  - \* Inland valley
  - \* Pollutant transport from Mexico



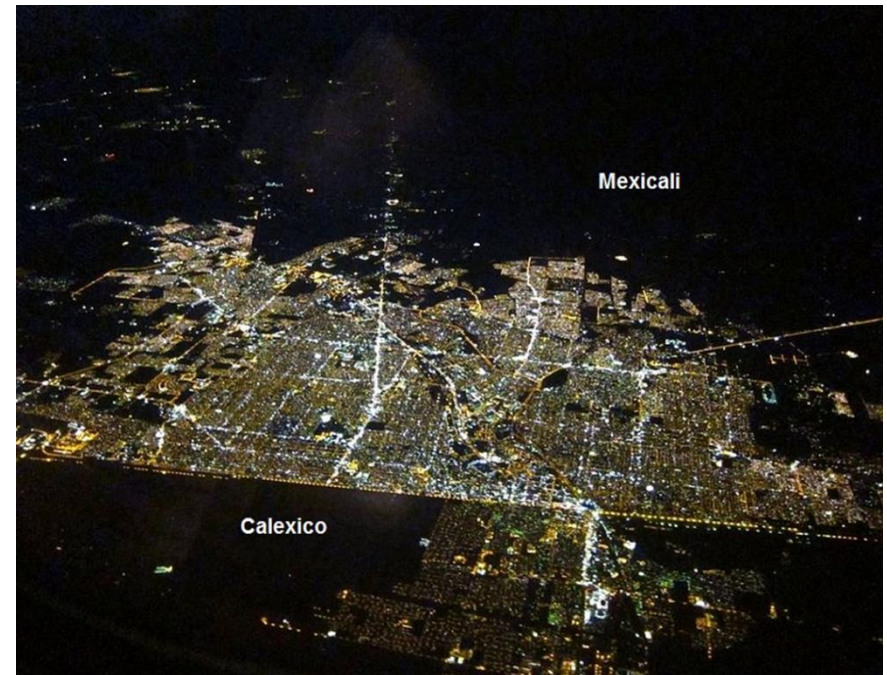
# Imperial PM<sub>2.5</sub> Air Quality

- \* Three cities similar in size, population, and emissions
- \* PM<sub>2.5</sub> levels improving throughout region
- \* Calexico only remaining location over the 24-hr PM<sub>2.5</sub> standard



# Nature of Calexico PM<sub>2.5</sub> Problem

- \* Calexico and Mexicali share common airshed
- \* Mexicali has significantly larger population and emissions
- \* Stagnant winter conditions allow pollution to accumulate in border region



# Clean Air Act – International Border Areas

- \* Clean Air Act contains provisions to address cross-border pollutant transport
- \* Includes technical demonstration to identify impact of international emissions
- \* States must address controls on local sources

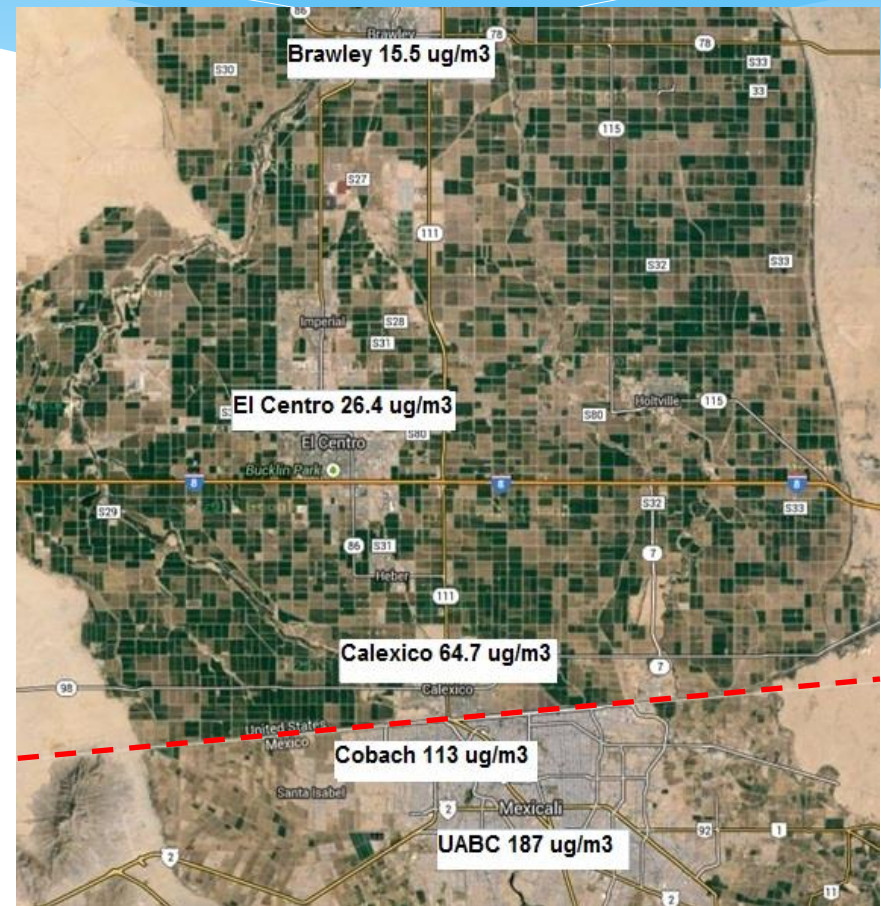
# Assessing Impact of International Emissions

- \* Based on U.S. EPA guidance
- \* Comprehensive analysis of exceedance days:
  - \* Wind patterns
  - \* Emission inventories
  - \* Chemical composition of PM<sub>2.5</sub>
  - \* Source identification

# Assessment Results

PM<sub>2.5</sub> concentrations on December 23, 2012

- \* Concentrations increase during wind flow from the south
- \* Highest concentrations focused in border region
- \* Exceedances linked to unique signature of Mexicali sources





# PM<sub>2.5</sub> SIP Elements

- \* Ensures air quality improvement:
  - \* Reasonably Available Control Measures
  - \* Quantitative emissions milestones
  - \* Commitment for Further Study Measures
- \* Demonstrates local emissions at level to attain PM<sub>2.5</sub> standard

# Improving Border Air Quality

- \* Imperial County APCD, ARB, and U.S. EPA working collaboratively with counterparts in Mexico
  - ✓ MOU – California & Mexico
  - ✓ Mexicali/Imperial AQ Task Force
  - ✓ Border 2020 Program
  - ✓ Diesel Truck Inspection Program
  - ✓ Mexicali Monitoring Study
  - ✓ Port-of-Entry Vehicle Idling Study
  - ✓ Imperial County/Mexicali Outreach & Education

# Staff Recommendation

- \* Imperial County PM<sub>2.5</sub> Plan meets applicable requirements of the Clean Air Act
- \* Approve Imperial County PM<sub>2.5</sub> Plan as a revision to the California SIP