

Imperial County 2013 State Implementation Plan for the Federal PM_{2.5} 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

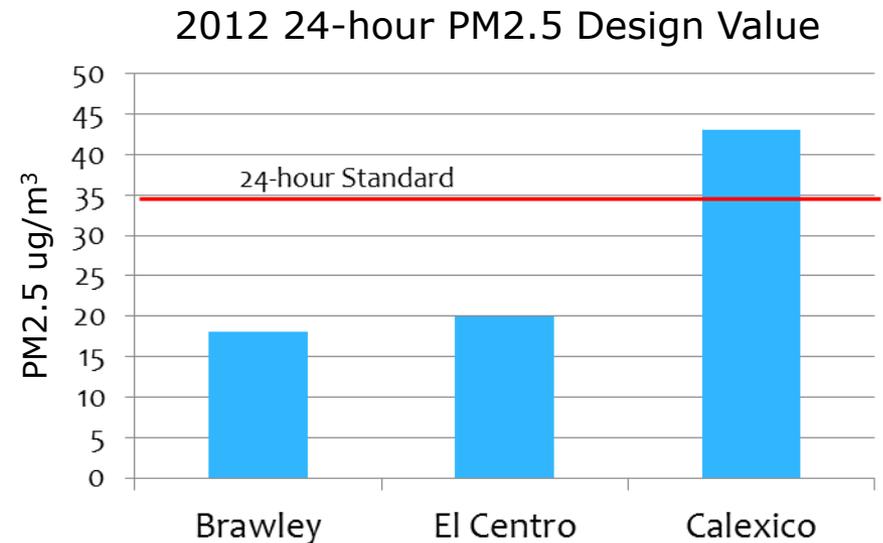
Imperial County Nonattainment Area

- * Portion of county nonattainment for 24-hour PM_{2.5} standard
- * Air quality challenges:
 - * Inland valley
 - * Pollutant transport from Mexico



Imperial PM_{2.5} Air Quality

- * Three cities similar in size, population, and emissions
- * PM_{2.5} levels improving throughout region
- * Calexico only remaining location over the 24-hr PM_{2.5} standard



Nature of Calexico PM_{2.5} 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

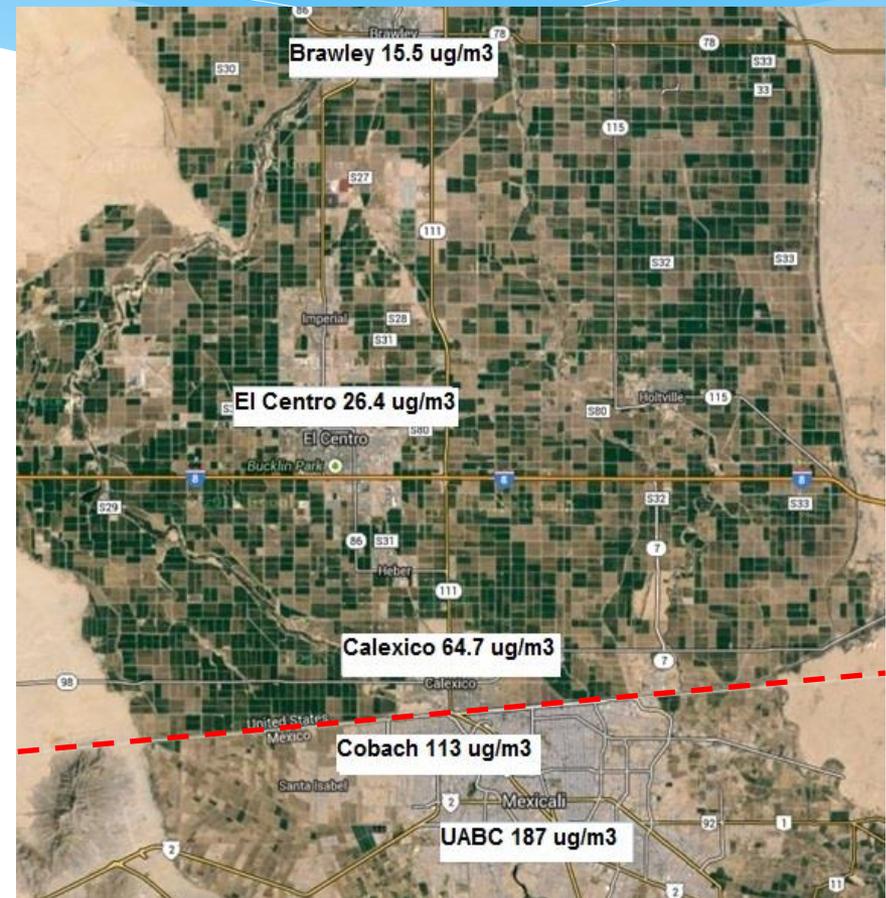
Assessing Impact of International Emissions

- * Based on U.S. EPA guidance
- * Comprehensive analysis of exceedance days:
 - * Wind patterns
 - * Emission inventories
 - * Chemical composition of PM_{2.5}
 - * Source identification

Assessment Results

PM_{2.5} 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_{2.5} 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_{2.5} 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_{2.5} Plan meets applicable requirements of the Clean Air Act
- * Approve Imperial County PM_{2.5} Plan as a revision to the California SIP