

The Gateway Cities
Air Quality Action Plan

Gateway Cities AQAP AQ/HRA Protocol Development

Technical Roundtable
August 10, 2011



Made possible with support from



Scope of Protocol

Study Area

- All Gateway Cities
- Wilmington
- Carson



Scope of Protocol

4 Scenarios

- 2009:
 - Current conditions
- 2023 (construction ongoing, AQMD inventory available):
 - All “booked” AQ improvement strategies
 - I-710 construction staging and phasing concept
- 2035 (I-710 construction completed):
 - All “booked” AQ improvement strategies
 - Includes I-710
- 2035:
 - All “booked” AQ improvement strategies plus
 - Any Additional strategies (AQAP)

Scope of Protocol

Technical Assessments

- Quantifications of emissions
 - Criteria pollutants, toxic air contaminants (TACs), greenhouse gases
 - For both general activity and I-710 construction
- Identification of additional AQ improvement strategies
- Air dispersion modeling
 - Criteria Pollutants and TACs

Scope of Protocol

Technical Assessments cont.

- Hotspot assessment
 - Criteria Pollutants and diesel particulate matter
 - Specific locations and/or a representative
- Human health risk assessment
 - TACs and PM_{2.5} mortality and morbidity

Protocol Development Process

- AQ/HRA TWG – 1 May 17th
- AQ/HRA TWG – 2 June 21st
- Technical Roundtable – 1 July 13th
- Advisory Roundtable – 1 July 14th
- AQ/HRA TWG – 3 July 25th
- Technical Roundtable – 2 August 10th
- Advisory Roundtable – 2 August 11th

Key Issues and Resolution

1. Use of the AQ and HRA in decision making
 - *Provided to the COG membership*
2. Construction staging concept / emissions analysis
 - *Emission analysis to be provided to I-710 EIR/EIS team for further consideration.*
 - *AQ/HRA of Construction Concept emissions will be conducted as part of larger AQAP AQ/HRA.*
3. Study Area
 - *Expanded study area to include Wilmington and Carson per US EPA suggestions*

Key Issues and Resolution

4. Offroad and nonpoint stationary source emissions
 - *Spatial resolution to be refined per AQMD suggestion*

5. Hotspot Analysis Methodology
 - *Hotspot selection criteria modified per AQMD suggestion*
 - *Analysis refinements added per US EPA and ARB suggestions*

Key Issues and Resolution

6. List of air toxics to be modeled
 - *Acrolein omitted per ARB suggestion (US EPA did not concur)*
7. Air dispersion model options
 - *Simulation period expanded from 1 year to 3 years per AQMD suggestion*
8. Air dispersion model
 - *CALPUFF selected per ARB suggestion*

Key Issues and Resolution cont.

9. Exposure and health risk assessment methodology
 - *OEHHA approach selected per OEHHA, ARB and PoLB suggestions*
 - *PM_{2.5} mortality and morbidity analysis added per OEHHA, ARB, and US EPA suggestions*
10. Presentation of results
 - *Stratification of health risk by source category, pollutant, and demographics added per US EPA suggestions*

Key Issues and Resolution cont.

Next Steps

- Utilize the protocol to develop the emissions inventory and AQ/HRA
- Results will be presented in Spring 2012