

Baseline Inventory Summary for PR2301-  
Control of Emissions from  
New or Redevelopment Projects

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**PR2301- Stakeholder Working Group  
Subcommittee Meeting**

**October 8, 2008**

# PR 2301 Background

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- Measure is designed to reduce emissions related to new development and redevelopment projects
- Emission Reduction Commitment (t/d)

NO <sub>x</sub>	VOC	PM <sub>2.5</sub>
.8	.5	.5



# Project Development Phases

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## □ **Construction**

- Construction & Demolition PM Dust
- Construction Equipment
- On-Road Emissions
- Architectural Coatings
- Asphalt Paving
- Re-entrained Paved Road Dust

## □ **Operation**

- On-Site Natural Gas Consumption
- Consumer Products
- On-Road Emissions
- Architectural Coatings
- Lawn & Garden Equipment



# Inventory Methodology

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## Emission Growth Projections

- Follows 2007 AQMP Methodology
- Emissions due to growth is the difference between growth and control emissions and control-only emissions
- Identified between the years 2010 – 2014; and 2010 – 2023



# Inventory Methodology (cont.)

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## Emission Apportionment & Rationale

- **Construction Equipment-** Based on an estimate of 14.6% of emission associated with Government funded roads and projects, **85%** of growth emissions are attributable to PR2301
- **Asphalt Paving-** Upon exclusion of funded roads and projects, **57%** of growth emissions are attributable to PR2301

# Inventory Methodology (cont.)

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## Emission Apportionment & Rationale

- **Fuel Combustion-** Includes service, commercial and residential space & water heating. **100%** of growth emissions included for reduction by PR2301
- **On-Road Mobile Sources-** Includes trips from worker commutes, new residents, tenants or delivery trucks and excludes impacts from population increase not associated with new development. **50%** of light & medium duty vehicle emissions and **40%** of heavy duty are targeted for reduction.
- **Re-Entrained Paved Road Dust-** **50%** of road mile growth, and therefore emissions growth, is targeted for reduction

# Inventory Methodology (cont.)

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## Emission Apportionment & Rationale

- **Construction & Demolition Dust-** Since 4% of emissions are estimated from road construction, the remaining **96%** are targeted for reduction by PR2301
- **Transport Refrigeration Units-** After excluding pass through trips, half of the remaining trips, **40%**, is estimated to result from growth and will be targeted
- **Consumer Products-** Growth emissions correlate similarly with housing unit and population growth, thus **100%** of growth emissions will be targeted



# Inventory Methodology (cont.)

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## **Emission Apportionment & Rationale**

- **Architectural Coatings-** Growth emissions correlate primarily with housing units, thus **100%** of emission growth will be targeted under PR2301
- **Lawn and Garden Equipment-** Growth emissions correlate primarily with housing units, thus **100%** of emission growth will be targeted under PR2301



# PR 2301 Baseline Emissions (t/d)

<b>13 Source Categories</b>	<b>% Contribution to PR2301 (range)</b>	<b>2014 (Growth Emissions between 2010-2014)</b>	<b>2023 (Growth Emissions between 2010-2023)</b>
	40-100	NO <sub>x</sub> - 49.6 VOC- 15.2 PM <sub>2.5</sub> - 7.3	NO <sub>x</sub> - 29.8 VOC- 28.3 PM <sub>2.5</sub> - 8.8



## Baseline Emissions (Cont.)

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Emission reductions beyond what is assumed in the 2007 AQMP are potentially SIP creditable toward SIP obligations

# Emission Reduction Target

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## 2007 AQMP Commitment for 2023

	<b>NO<sub>x</sub> (t/d)</b>	<b>VOC (t/d)</b>	<b>PM<sub>2.5</sub> (t/d)</b>
Emissions Inventory	29.8	28.3	8.8
SIP Commitment	0.8	0.5	0.5