UPRR Mira Loma Auto Facility

- Facility Overview
- Sources of Emissions
- Comparison with Air Basin and Other Area Emissions
- Emission Reduction Measures
- Emission Trends – Past and Future
Union Pacific System Overview

South Coast is a Major Gateway

Fast Facts

- Miles of Track
  - 32,300 in 23 States
  - 3,455 in California
  - 1,272 in Los Angeles area

- Employees
  - 50,000+ in US
  - 5,900 in California
  - 1,900 in Los Angeles area
UPRR Mira Loma Auto Facility
Facility Overview

- 256-acre Automobile Distribution Center
- Facility Includes:
  - 2 Receiving / Departing Tracks
  - 12 Tracks Used to Unload Vehicles From Rail Cars
  - 10 Support Tracks to Hold Rail Cars
  - Tracks for Rail Car Maintenance
- Facility Operates 24 Hours a Day, 365 Days a Year
- About 8 Trains a Day Originate or Terminate at UP’s Mira Loma Yard
Mira Loma Auto Facility
Comparison with Other Sources of DPM Emissions

Total DPM Emissions – All South Coast Sources: 7750 tons per year
UPRR Mira Loma Auto Facility
Sources of Diesel Particulate Matter (DPM) Emissions

Total DPM Emissions – UPRR Mira Loma Facility: 4.9 tons per year
UPRR Mira Loma Auto Facility
UP Emission Reduction Measures

• Increased Use of Idle Control Devices (ICDs) for Auto Start-Stop of Locomotives
  – 76% of L.A. Area Intrastate Fleet Equipped Now
  – 100% of CA Intrastate Units Equipped by June 2008
  – 35% of UPRR Total Fleet
  – All New Locomotives Since 2001 Have Factory ICDs

• Aggressive Fuel Conservation Efforts – Since 1995
  – 12% Improvement in Fuel Efficiency
• Continued Aggressive Acquisition & Use of Tier 2 Road Locomotives With Advanced Emission Controls
  – 820+ Tier 2 Locomotives by December, 2007
  – 2,600+ Tier 0, 1, or 2 From 2000 Thru 2006

• Continued Remanufacture of Older Locomotives With New, Lower Emitting Components
  – 1,800 Units Since 2000

• On Target for Tier 2 Fleet Average in SoCal by 2010
UPRR Mira Loma Auto Facility

UP Emission Reduction Measures

• Ultra Low Emitting Locomotives (ULELs)
  – Reduce NOx & PM Emissions by +/− 85%
  – Reduce Fuel Consumption by Over 16 %

• Expanded Use of Technologically Advanced Switch Locomotives
  – Green Goats - 6 in Mira Loma NOW
  – Green Goats - 12 in South Coast NOW
  – Gensets - 61 in South Coast by July
UPRR Mira Loma Auto Facility
DPM Emissions by Source (Calendar Years 2000-2020)

Emissions (Tons / Year)

- Other
- On-road Diesel-fueled Trucks
- Cargo-handling Equipment (CHE)
- Locomotives

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UPRR Mira Loma Auto Facility
Emission Trends

• 57% Reduction From 2005 to 2020

• Overall 42% Reduction From 2000 to 2020, Including Growth

• 76% Reduction in DPM Emissions From 2005 to 2020 Per Vehicle Handled
THE ROAD TO THE FUTURE ISN’T A ROAD AT ALL.