SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

Town Hall Meeting

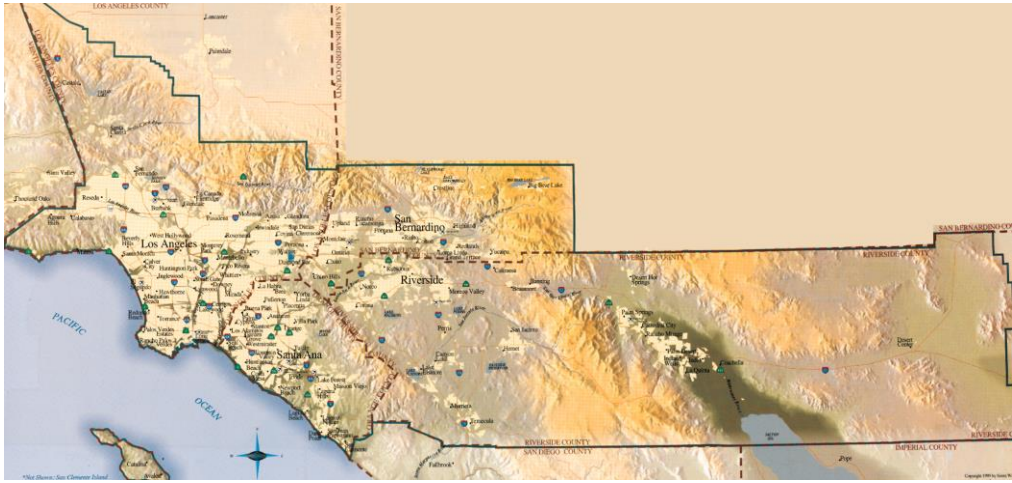
Carlton Forge Works

Thursday, January 23, 2014

Paramount CA

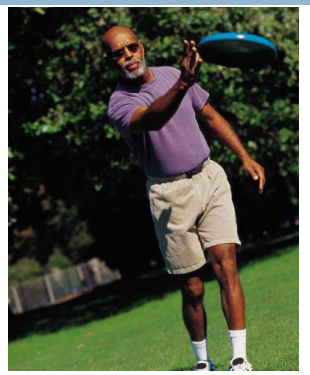
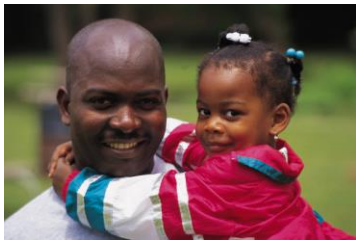
South Coast Air Quality Management District

- *Local air pollution control agency for Southern California (Orange County & non-desert portions of LA, Riverside & San Bernardino Counties)*
- *Population of 16.4 million (about half the population of the State of California)*
- *Regulates 27,000 facilities in the 10,743 mi^2 area*
- *Among the worst air quality in the U.S. (Ozone & PM 2.5)*



SCAQMD Mission



To achieve and maintain healthful air quality for all who live, work, and play in our region







Air Pollution in the South Coast

Historic and current challenges

- *Non-attainment of federal standards*
  - *Ozone (smog)*
  - *PM 2.5 (fine particulate matter)*
- *Air toxics*
- *Climate change (greenhouse gases)*
- *Basin-wide air quality improved*
- *Health impacts worse than previously understood*

SCAQMD Ensures Healthful Air by…

- *Developing and adopting:*
  - *An **Air Quality Management Plan**, the blueprint for achieving compliance with federal and state clean air standards.*
  - *Air quality **rules and regulations** designed to reduce emissions from various sources, including specific types of equipment, industrial processes, paints and solvents, even consumer products.*
- *Issuing **permits** to many businesses and industries to ensure compliance with air quality rules.*
- *Conducting periodic **inspections** to ensure compliance with air quality requirements.*

60,000 SCAQMD Permits Held by 27,000 Facilities

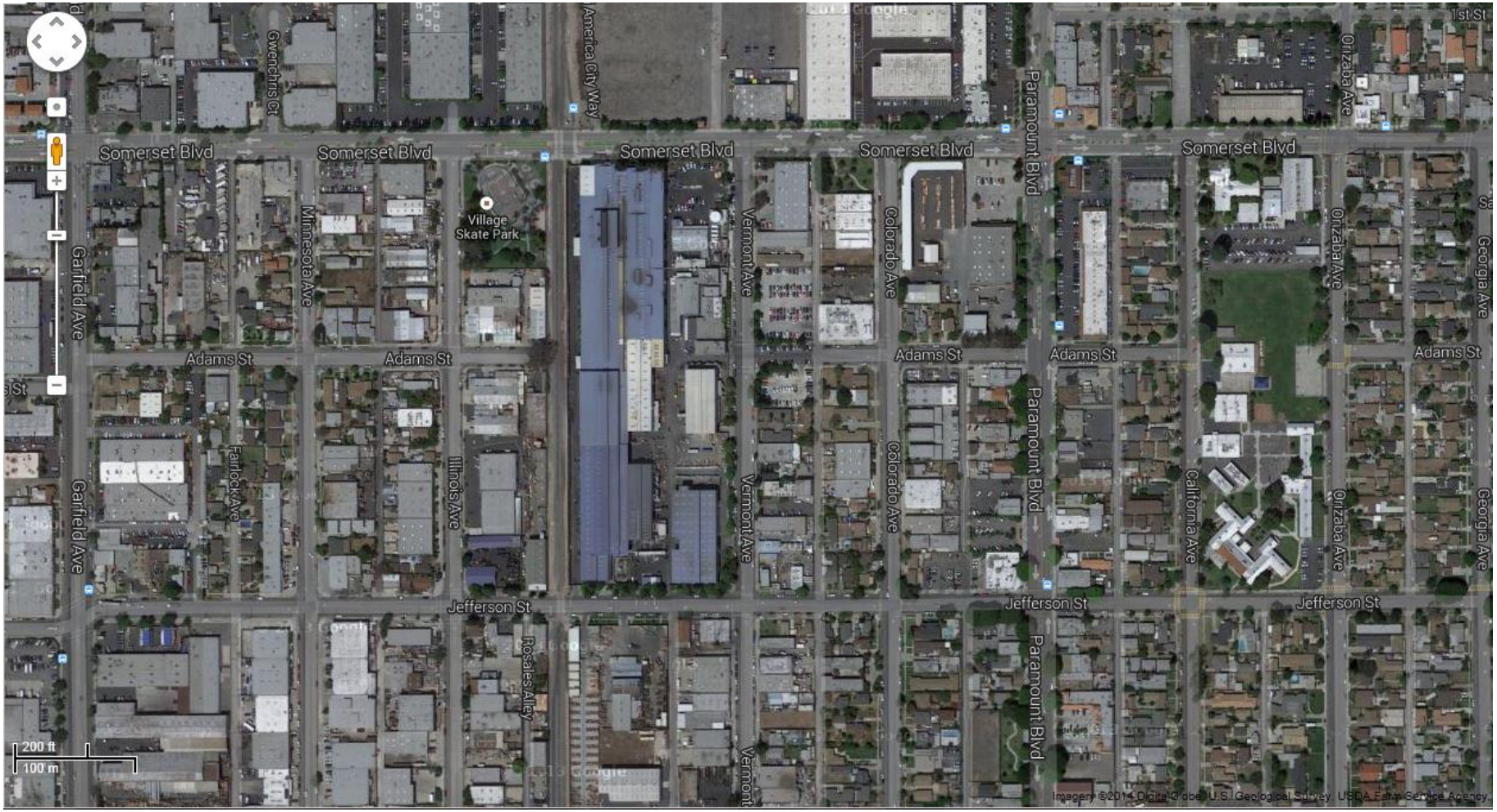
- *Service stations, dry cleaners, autobody shops, other neighborhood commercial operations (Non-major sources)*

- *Refineries, aerospace, power plants, chemical plants, sewage treatment and landfills (Major sources)*

Carlton Forge Works (CFW)

- *Founded as family business in 1929*
- *Subsidiary of Precision Castparts Corp since 2009*
- *Forges titanium, aluminum, iron, nickel, and cobalt based alloys and exotic high temperature metals*
- *Produces various types of ring forgings and powdered metal components*
- *Products used in aerospace for commercial & military aviation and land-based gas turbine engines*

Carlton Forge Works (CFW)



Carlton Forge Works (CFW)

Major Source of Nitrogen Oxides (NOx)

- *Subject to Title V and RECLAIM requirements*

Process	Permitted Equipment
Forging & Air Pollution Control (APC) System	*63 furnaces* *1 forging hammer* *2 electrostatic precipitators (ESPs)*
Abrasive Blasting & APC System	*1 abrasive blasting machine* *1 cartridge filter baghouse*
Spray Testing & APC System	*1 spray booth*

Carlton Forge Works (CFW)

Compliance history

- Two (2) Notices of Violation in the last ten (10) years
  - Failure to submit required emissions reports (Sept 2012)
  - Exceeding permitted fuel limit (Jan 2014)
- 55 odor complaints received since 2012
  - 8 complaints in 2012
  - 47 complaints in 2013
  - 42 of 55 complaints (76%) made by one individual

SCAQMD Air Monitoring Activities

- *Purpose*
  - *Assess air pollution impact of CFW operations at multiple locations downwind of the facility*
- *Approach*
  - *Combine different air monitoring technologies and sampling strategies*
  - *Sample at multiple community locations downwind of CFW*
- *Sample collection*
  - *Gaseous and particulate pollutants in ambient air*
  - *Soil and dust samples from the CFW facility and from the nearby community*

SCAQMD Sampling Activities

Wipe sample location (Table 1b)

Glass plate sample location (Table 3)

Ambient sample location (Table 4)

VOC sample location (Table 5)

Summary of Results

- *Higher metal concentrations measured closest to CFW decrease with increasing distance from the facility*
- *Measured metals consistent with sampled material at CFW*
- *Air concentrations downwind of CFW*
  - *Nickel, Chromium, Hexavalent Chromium, Cadmium exceeded Basin average levels (MATES III, 2004-2006)*
  - *On several days, 24-hr average concentrations of Nickel exceeded the 1-hour and/or 8-hr RELs.*
  - *Not enough data to estimate long-term risk, but Nickel and hexavalent chromium of concern*
  - *Recent trends show reduced levels*
- *Measured VOC concentrations were within ambient ranges typically observed throughout the South Coast Air Basin*

SCAQMD Actions

- *Conducted 106 field activities (inspections, complaint investigations, sample plate placement, surveillance) associated with CFW since 2012*
- *Requested that CFW prepare and submit to SCAQMD a detailed air toxics inventory report in consideration of need for a Health Risk Assessment*
- *Required CFW to file applications with SCAQMD for permits to operate grinding and associated air pollution control equipment. Applications under review*
- *Met with CFW several times to discuss potential reduction in emissions*

Voluntary Actions Taken by CFW

Improved operational efficiency and evaluated options to reduce emissions

- *Moved grinding operations closer to dust collection devices*
- *Increased air flow through its air pollution control equipment*
- *Closed roof vents & isolated grinding area by installing plastic strip curtains*
- *Modified grinding station collection booths and evaluated other changes to improve fugitive dust collection efficiency*
- *Increased the frequency and improved the effectiveness of housekeeping practices*
- *Hired a consultant to perform stack source testing and ambient monitoring in the vicinity of CFW facility*

SCAQMD Follow-Up Activities

- *Continuing to collect ambient air samples at two nearby locations to assess long-term exposure levels in the community*
- *Continuing to respond to air quality complaints and observe CFW operations during inspections and investigations*
- *Focusing rule development activities on reduction of fugitive emissions from metal processing operations*