



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 mi² area*
- *Among the worst air quality in the U.S. (Ozone & PM 2.5)*

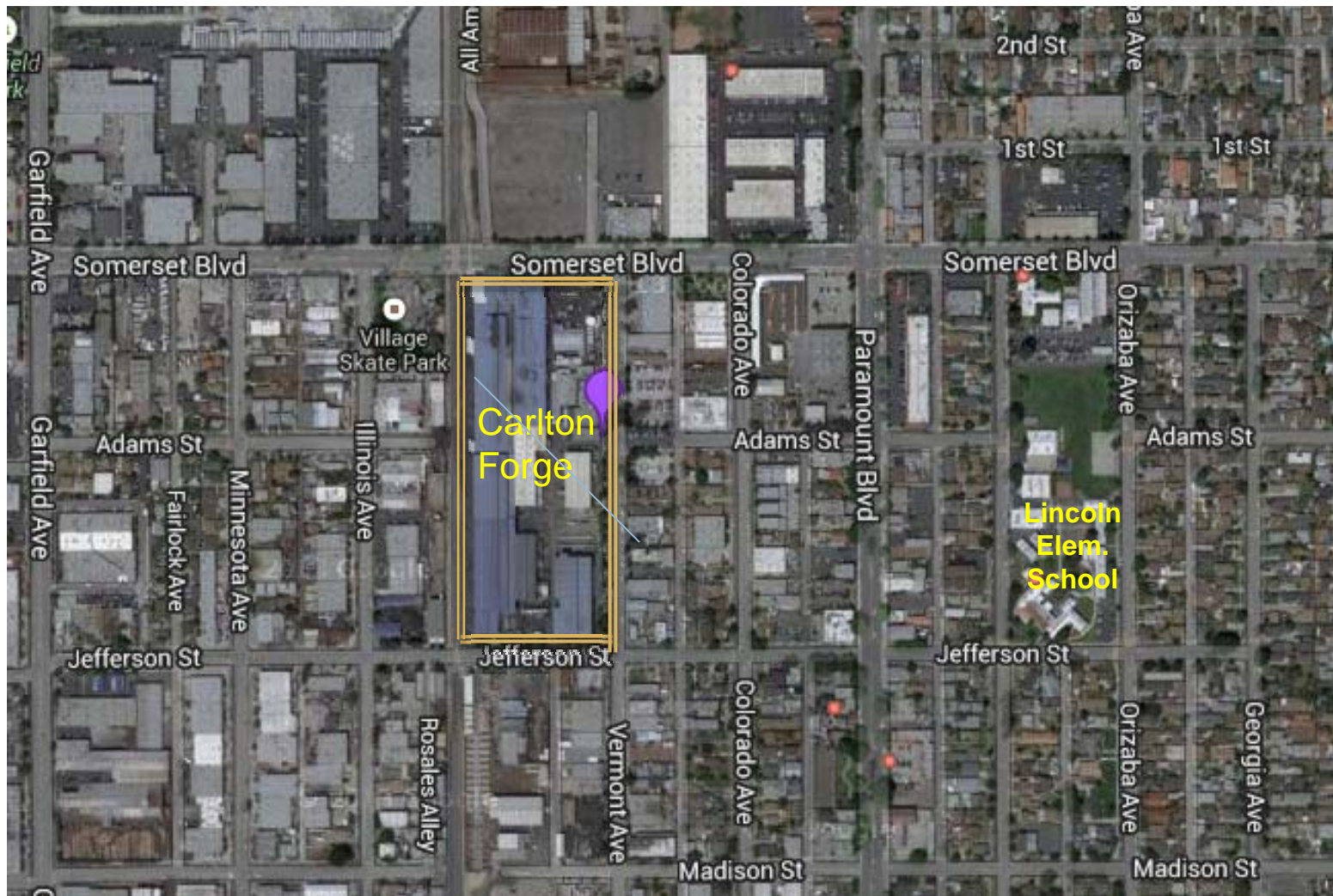


Carlton Forge Works (CFW)

- *Founded as a family business in 1929*
- *Subsidiary of Precision Castparts Corp since 2009*
- *Forges carbon and alloy steels, as well as, titanium, aluminum, iron, nickel, and cobalt based high temperature metal alloys*
- *Produces various types of ring forgings and other 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 (NO_x)

- ▣ *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)

History

- *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*
 - *Collect samples and test emissions at the facility*
 - *Sample at multiple community locations downwind of CFW*



Types of Samples Collected

- *Material Sampling*
 - *Wipe sampling of surfaces on the rooftop and near exhaust stacks*
 - *Bulk sampling of material collected by the facility's air pollution control equipment (baghouses)*
 - *Deposition plate sampling both at the facility and downwind in the community*
- *Air Sampling*
 - *Instantaneous "grab" sampling for Volatile Organic Compounds (VOCs) immediately outside facility*
 - *Source testing of emissions at facility exhaust points*
 - *Ambient air sampling of airborne particles for toxic metals*

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 determine long-term risk*
 - *Recent trends show reduced levels*
- *Measured toxic VOC concentrations were within ambient ranges typically observed throughout the South Coast Air Basin*



Issues of Public Health Concern

- *Toxic risk from significant short-term exposures and potentially long-term exposures to elevated levels of Nickel compounds*
- *Moderately elevated hexavalent chromium and cadmium on several days*
- *Historical deposition of toxic metals to surfaces and the soil in the community (CA Dept. of Toxic Substance Control)*



SCAQMD Actions

- Conducted over 100 field activities (inspections, complaint investigations, sampling/testing, 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 are under review
- Initiate rulemaking
 - ▣ New Metal Forging, Grinding and Processing Rule
 - ▣ Revise Toxics Rule for Existing Sources



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 stations' collection booths and are evaluating other changes to improve fugitive dust collection efficiency*
- 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*
- *Adopt new metal forging, grinding & processing rule and amend toxics rule for existing sources in summer 2014*