

City of Paramount Town Hall Meeting

Tuesday, August 16, 2016

Paramount Community Center, Paramount CA



South Coast Air Quality Management District (SCAQMD)

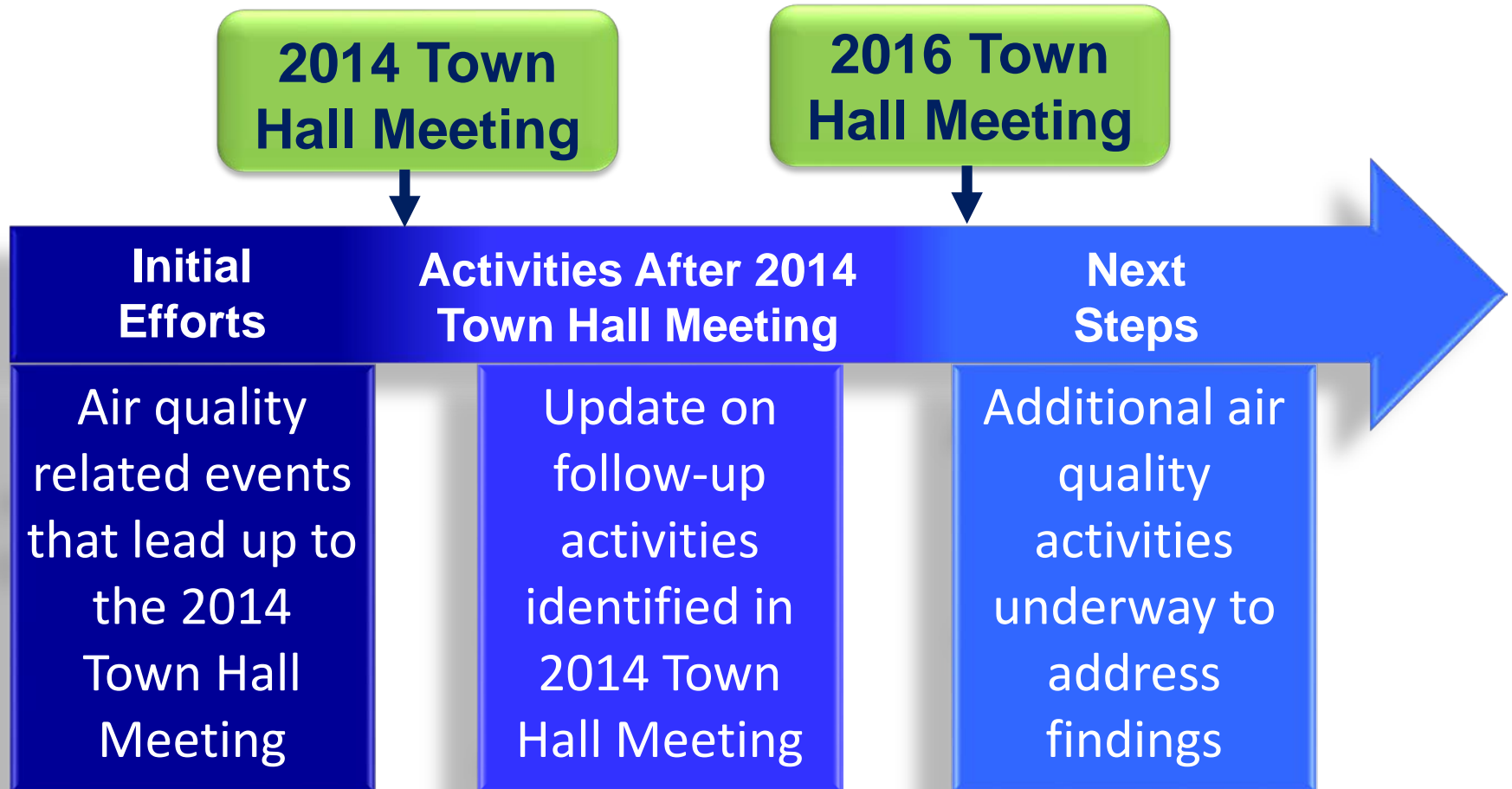
- Local air pollution control agency for Southern California (Orange County and portions of LA, Riverside & San Bernardino Counties)
- Population of 16.4 million (about half the population of the State of California)
- Regulates 27,000 facilities in the 10,743 mi² area
- Among the worst air quality in the U.S. (Ozone & PM 2.5)



Key SCAQMD Activities

- Develops and adopts:
 - **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
- Issues **permits** to many businesses and industries to ensure compliance with air quality rules
- Conducts periodic **inspections** to ensure compliance with air quality requirements
- Responds to **air quality complaints** from the public
- Conducts ambient air quality **monitoring** including special studies

Presentation Overview



SCAQMD Initial Efforts in the Paramount Area



Beginning 2012, SCAQMD began receiving a series of burnt metallic odor complaints – a number of complaints focused on Carlton Forge Works (CFW)



May 2013 - Glass plate sampling at and near CFW confirmed fugitive metal particulate emissions



August 2013 – SCAQMD begins ambient air monitoring near CFW



September 2013 - CFW began voluntarily implementing measures to reduce fugitive emissions from their grinding operations



January 2014 – SCAQMD hosts a town hall meeting to report initial monitoring results

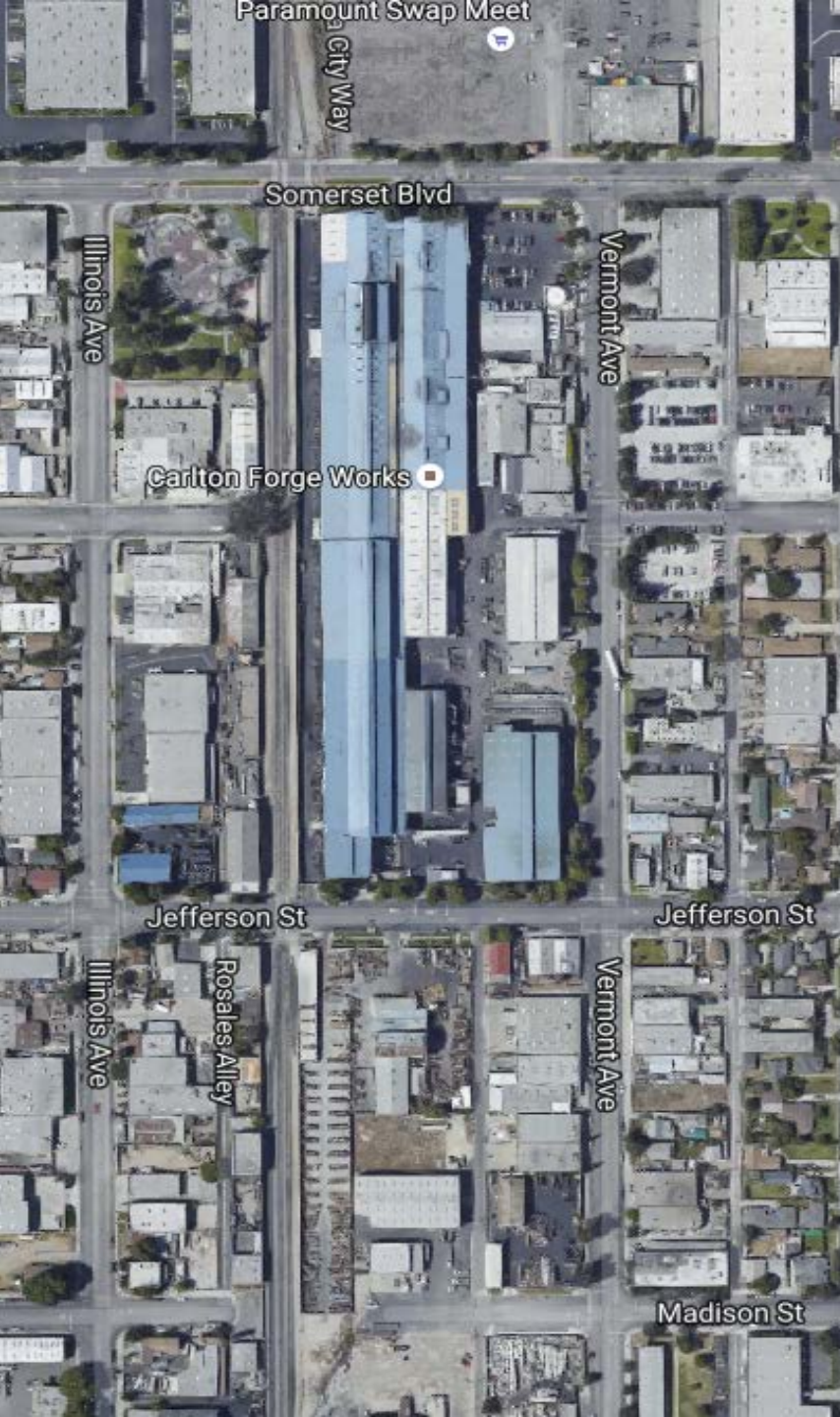
Follow-up Activities from 2014 Town Hall Meeting

- 2014 Town Hall Meeting committed to three follow-up activities:
 1. Continue ambient air monitoring to assess long-term exposure
 2. Continue air quality complaint response and observe CFW operations
 3. Pursue rule development activities of fugitive emissions from metal processing operations



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

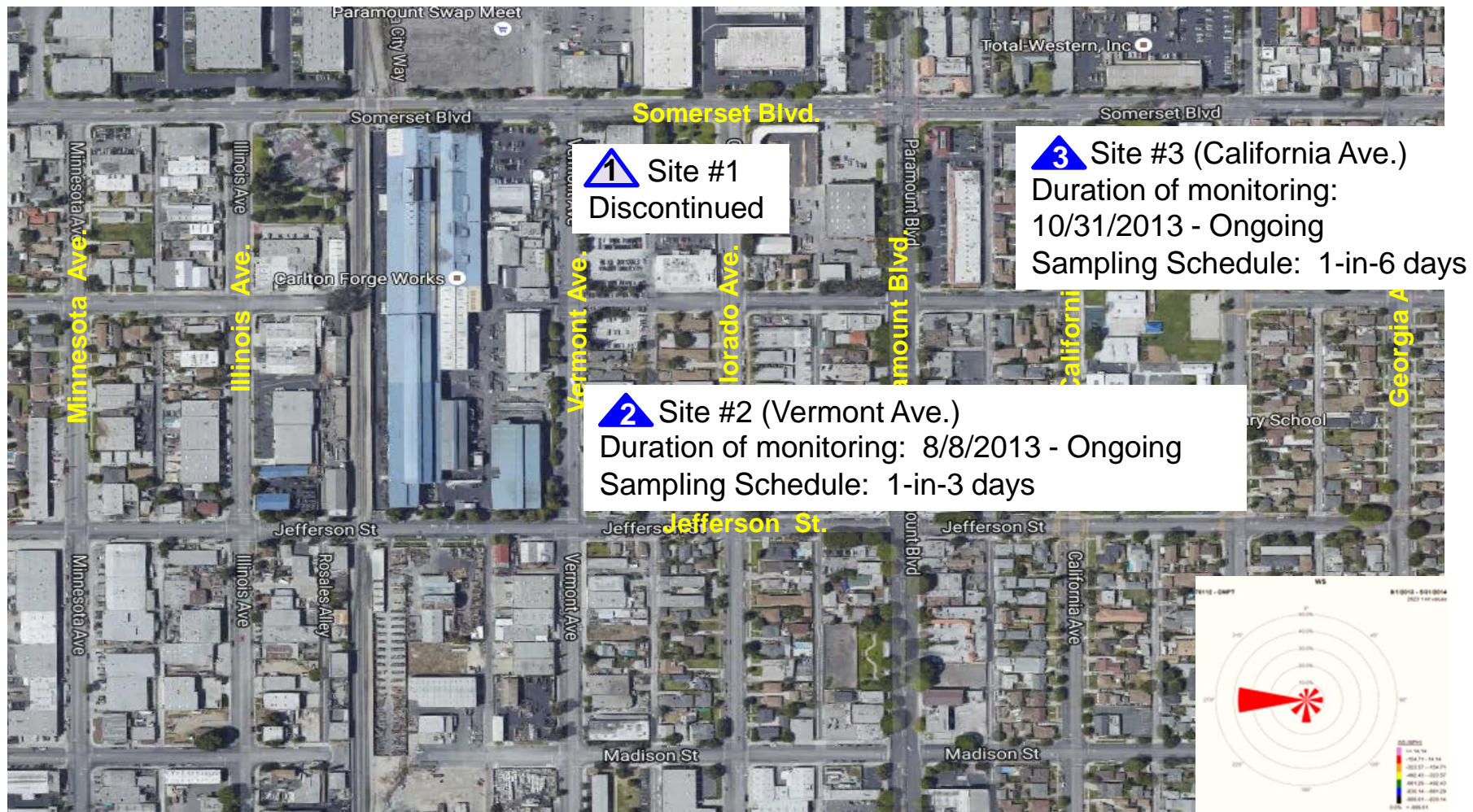


Status Update on Follow-Up Activity #1: Continue Ambient Air Monitoring to Assess Long-Term Exposure

Summary of Recent Ambient Air Monitoring Results

- Continued ambient air monitoring at two sites in Paramount community since August 2013
 - Site #2 (Vermont Ave.)
 - Site #3 (California Ave.)
- Initial monitoring identified Nickel and Hexavalent Chromium as two key toxic metals of concern
 - Nickel (primary health effects non-cancer)
 - Hexavalent Chromium (primary health effects cancer)
- Monitoring results for the two metals were compared to:
 - Background levels from the Multiple Air Toxics Exposure Study (MATES IV)
 - Other health thresholds (discussed in next slides)

Continued Ambient Air Monitoring – Sampling Locations



How are Health Risks Measured?

- **Cancer Risk**

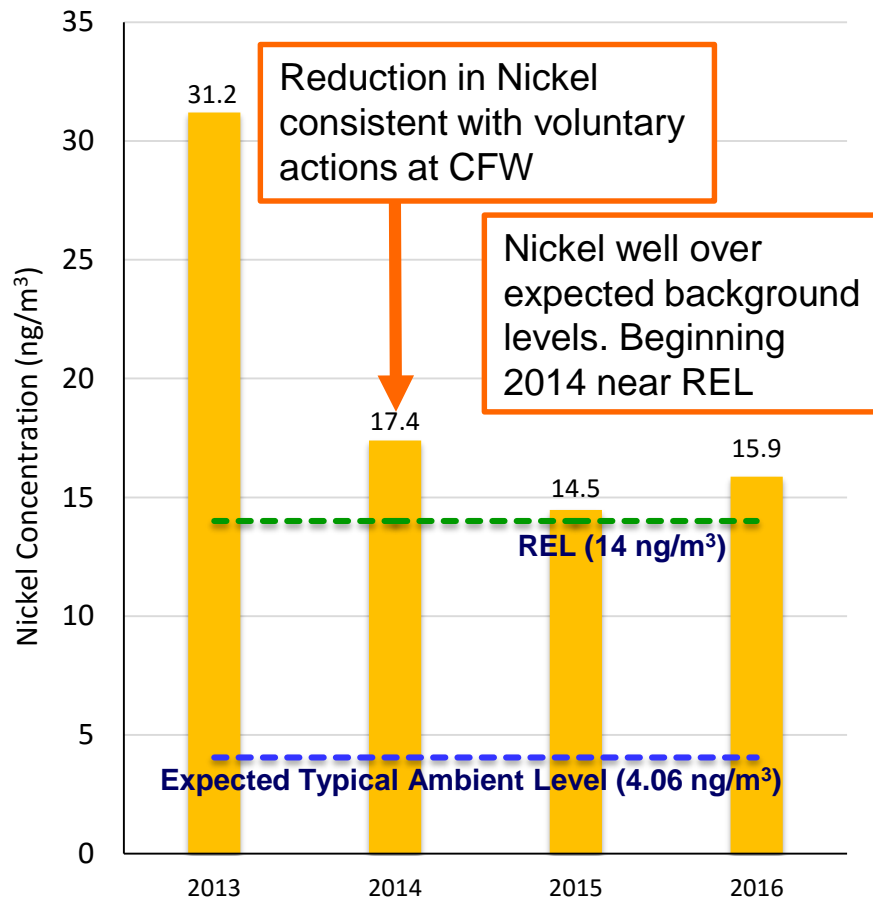
- Cancer risks are a measure of the chance or odds that a person will get cancer
- Represented as number of chances in one million of getting cancer
- “Background” cancer risk from MATES IV from all sources of emissions: Basin average: 900 in one million; Local area: 1,120 in one million

- **Non-Cancer Risk**

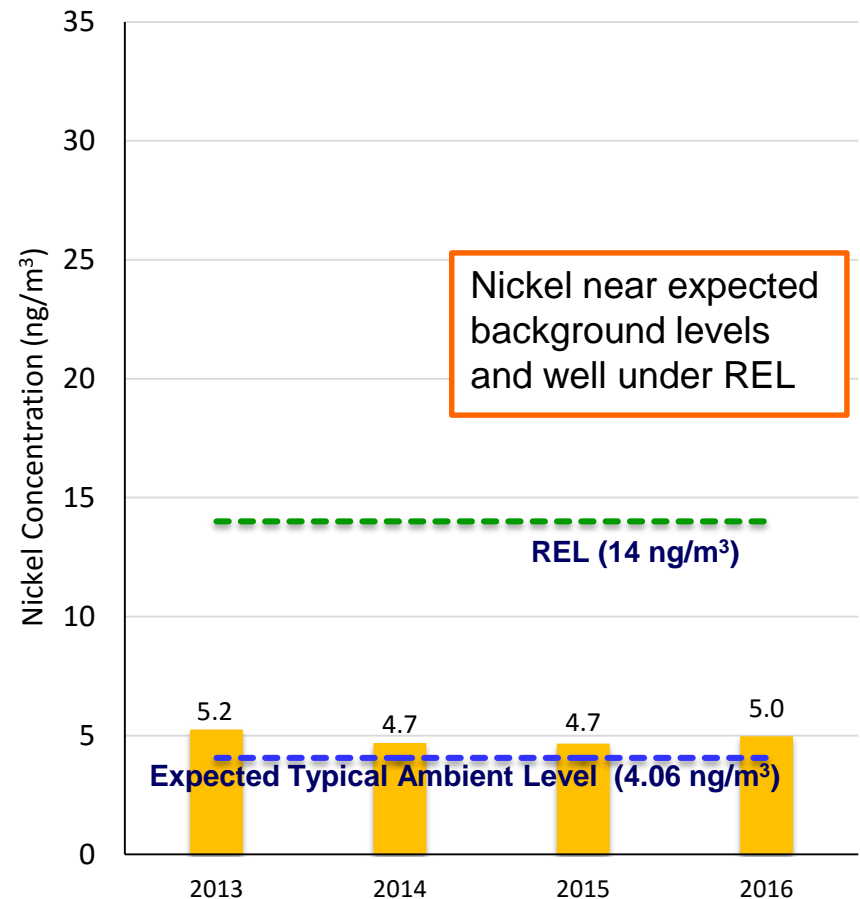
- Air concentrations compared to a Reference Exposure Level (REL)
- Pollutant levels below the REL are not expected to cause a non-cancer health effect
- Pollutant levels above the REL do not necessarily yield a health effect, but do increase the likelihood that a health effect will occur

Results of Nickel Ambient Air Monitoring (Concentration)*

Site #2 (Vermont Ave.)



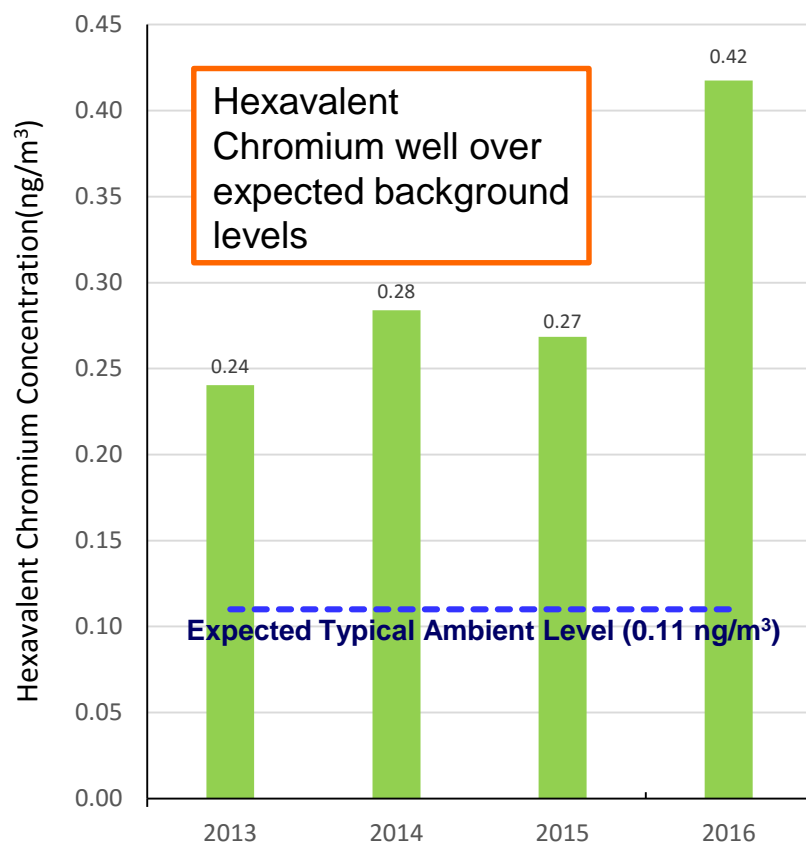
Site #3 (California Ave.)



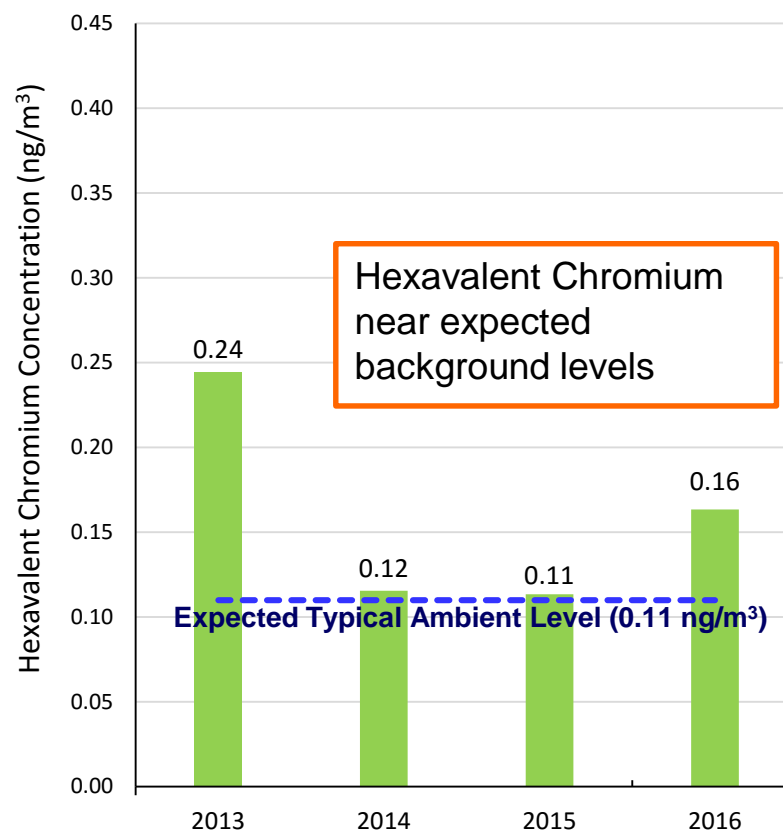
* 2013 and 2016 data are partial years

Results of Hexavalent Chromium Ambient Air Monitoring (Concentration)*

Site #2 (Vermont Ave.)



Site #3 (California Ave.)



* 2013 and 2016 data are partial years

Potential Health Risks Based on Monitoring Data

- Potential **cancer risk** from long-term exposure to Nickel and Hexavalent Chromium:
 - Site #2 (Vermont Ave.): 176 in-one-million
 - Site #3 (California Ave.): 74 in-one-million
 - Hexavalent Chromium ~95% of cancer risk
- Potential **non-cancer risk** from long-term exposure to Nickel:
 - Site #2 (Vermont Ave.): levels have dropped since 2013, but still above REL
 - Site #3 (California Ave.): levels well below REL
 - Hexavalent Chromium non-cancer risks well below thresholds

Summary of Monitoring Results

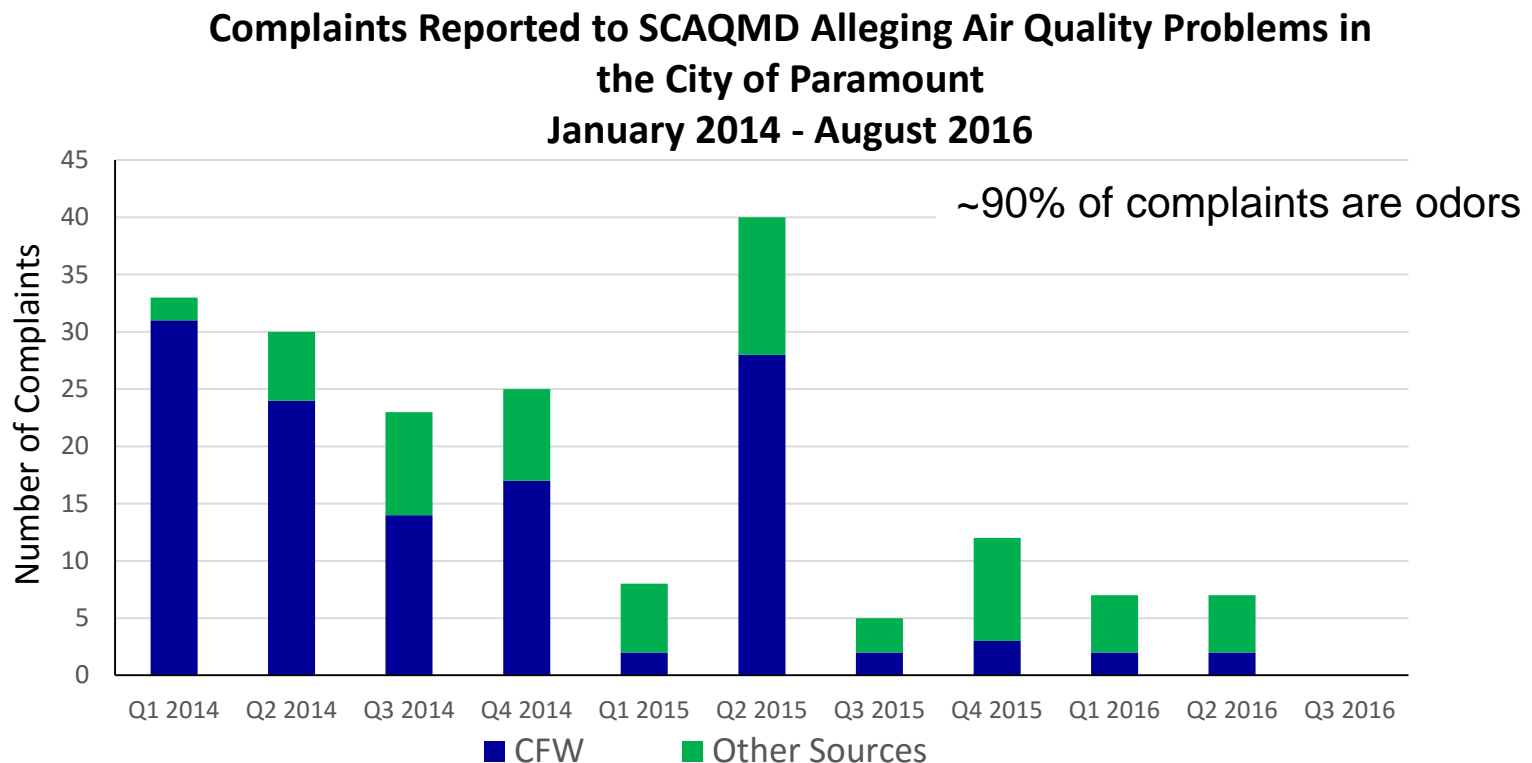
- Site #2 (Vermont Ave.)
 - 2014 Nickel reductions consistent with CFW 2013 actions
 - Beginning 2014 Nickel levels near REL
 - Hexavalent Chromium emissions levels up to 4 times higher than expected background levels
 - Estimated cancer risk is of concern (Hexavalent Chromium contributes to 95% of cancer risk)
 - Additional sampling needed to identify the Hexavalent Chromium source(s) (Next Steps)
- Site #3 (California Ave.) - Nickel and Hexavalent Chromium near expected background levels in 2014 and 2015, but higher in 2016



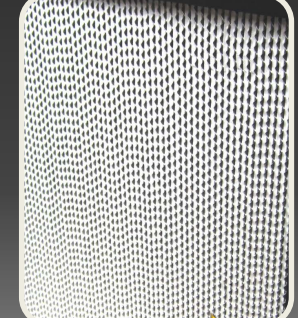
**Status Update on
Follow-Up Activity #2:
Continue Air Quality
Complaint Response
and Observe CFW
Operations**

Update on Air Quality Complaints

- Continued inspections of CFW and response to air quality complaints received from Paramount community



Actions Implemented at CFW



Emission Reduction Measures

**September
2013**

Increased baghouse airflow by 35% for improved collection efficiency

**October
2013**

Installed plastic strip curtains on all building overhead doors

**October
2013**

Placed grind shop work tables closer to baghouse exhaust intakes

**November
2013**

Sealed grind shop roof to provide a Permanent Total Enclosure

**December
2013**

Enhanced house-keeping measures such as routine sweeping

**Spring
2015**

Installed HEPA filters on baghouse

Health Risk Assessment for CFW

- In October 2014, under SCAQMD's Rule 1402, CFW submitted a Health Risk Assessment to estimate the cancer and non-cancer risk
 - Anticipate approval within next several weeks
 - Once approved, HRA will be made available on SCAQMD website
- If risks exceed SCAQMD thresholds, a public meeting will be held to discuss HRA results and next steps



**Status Update on
Follow-Up Activity #3:
Pursue Rule
Development Activities
of Fugitive Emissions
from Metal Processing
Operations**

Metal Processing Rules Under Development



**Metal
Grinding
at Forging
Facilities**

***Rule 1430**



**Metal
Plating
and
Finishing**

**Rule 1469
Rule 1426**



**Metal
Melting
and
Foundries**

**Rule 1420
Rule 1420.1
Rule 1420.2
Rule 1407**



**Other
Metal
Working
and
Treating**

TBD

*Proposed Rule - under development

Key Metal Working Rules Affecting Paramount Industries

- Grinding at metal forging (Proposed Rule 1430)
 - Purpose: Address fugitive toxic metal emissions from grinding and possibly other operations at metal forging facilities
 - Initiated Stakeholder Working Group Meeting in 2015
 - Schedule: Spring 2017 adoption
- Metal plating and finishing (Proposed Amended Rules 1469 and 1426)
 - Purpose: Further control fugitive toxic metal emissions from metal plating operations
 - Conducting site visits and data gathering
 - Schedule: Summer 2017 adoption
- Other metal working and treating
 - Purpose: Further control fugitive toxic metal emissions from metal cutting, working, and heat treating facilities
 - Beginning to conduct site visits and data gathering
 - Schedule: Winter 2017 adoption

Next Steps

- Continue investigation and air monitoring, with an expanded focus on identifying and controlling the source(s) of Hexavalent Chromium
- City of Paramount and CFW cooperating for additional Hexavalent Chromium monitoring



Next Steps (*Continued*)

- Continue monitoring toxic metals at Site #2 (Vermont Ave) and Site #3 (California Ave)
- Finalize approval of CFW's AB2588 Health Risk Assessment
- Continue rule development for Proposed Rule 1430 (grinding at forging facilities) and other toxic metal rules
 - Next Working Group Meeting in September 2016
 - Commitment to hold multiple working group meetings in Paramount