



# **Compton Town Hall Meeting February 21, 2018**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT



**Derrick Alatorre**  
**Deputy Executive Officer**  
**Legislative & Public Affairs/Media Office**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# Who is SCAQMD?

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties. This area of 10,743 square miles is home to over 16.8 million people.

Air pollution affects our health. Because this area's smog problem is so severe, SCAQMD is often at the forefront of efforts to control pollution.



# Key SCAQMD Activities

- Develop and adopt:
  - Air Quality Management Plan, the blueprint for achieving compliance with federal and state clean air standards
  - Air quality rules and regulations to reduce emissions from various sources
- Issue permits to many businesses and industries to ensure compliance with air quality rules
- Conduct periodic inspections to ensure compliance with air quality requirements
- Respond to air quality complaints from the public
- Conduct ambient air quality monitoring including special studies

# Overview

- Health Effects of Hexavalent Chromium
- Compliance & Enforcement Summary
- Air Monitoring
- Next Steps



**Jo Kay Ghosh, Ph.D.  
Health Effects Officer  
Planning, Rule Development, & Area Sources**

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# Hexavalent Chromium Health Effects

- Main concern is long-term exposure (years to decades)
- Known to cause lung and nose cancers in people





**Marian Coleman**  
**Deputy Executive Officer**  
**Compliance & Enforcement**

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# Compliance Update

- Inspected 51 facilities
- Issued 16 Notices of Violations
- Issued 52 Notices to Comply
- Investigated 56 complaints
- Obtained 71 samples from 8 facilities
- Performed additional screening

# What is X-Ray Fluorescence (XRF)?

- Used XRF as screening tool to identify metals in materials around facilities
- XRF identifies total chromium, not hexavalent chromium
- If elevated levels of total chromium are found, further investigation may be needed

# Map of XRF Screening Areas





**Jason Low, Ph.D.**  
**Assistant Deputy Executive Officer**  
**Science & Technology Advancement**  
**Monitoring and Analysis**

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# Airborne Hexavalent Chromium Monitoring in Compton



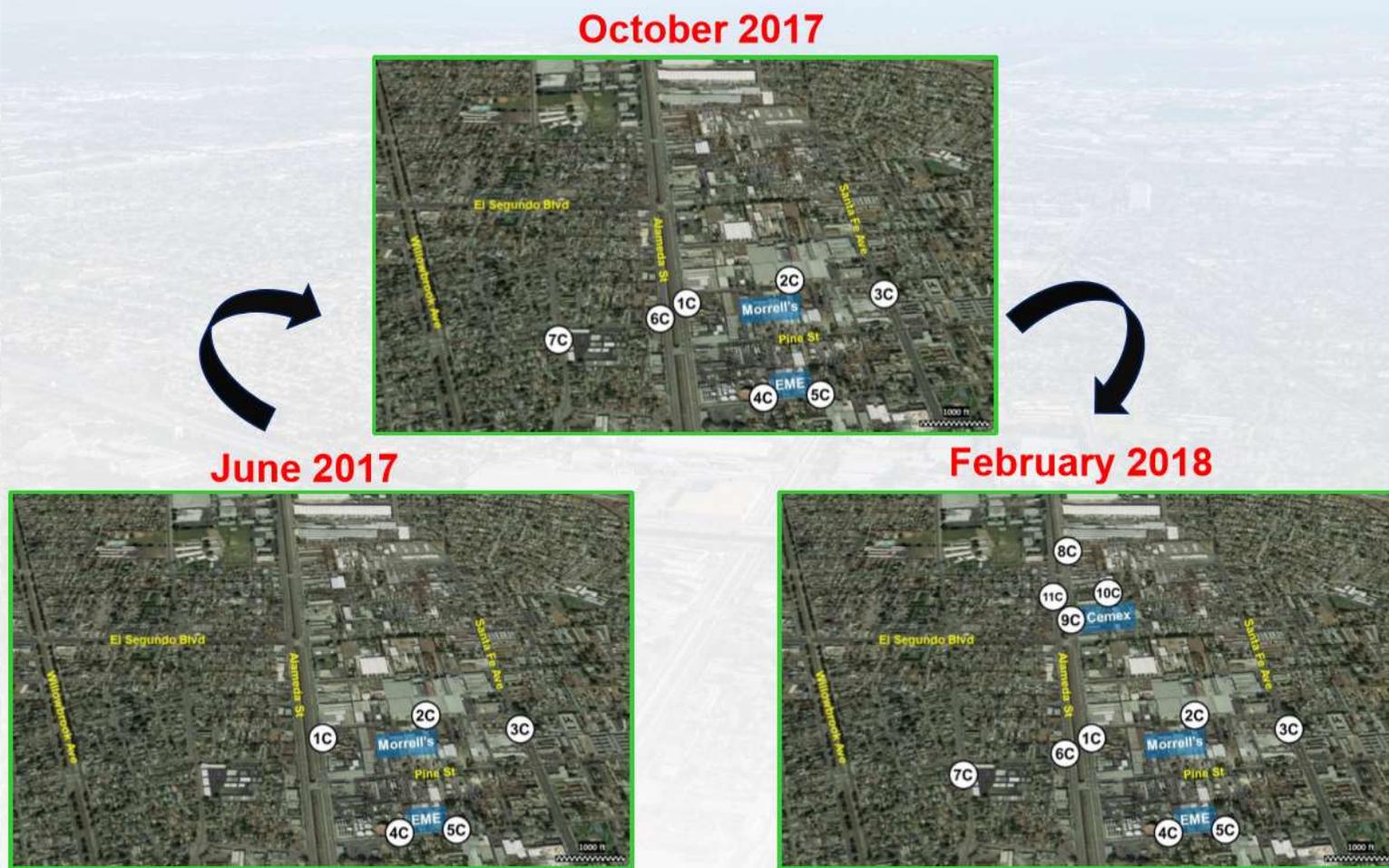
- SCAQMD began air monitoring in the Compton area in July 2017 to measure levels of hexavalent chromium near several industrial facilities
- Multiple facilities were identified through a systematic prioritization process
- Air monitoring efforts focused initially on chromium plating and anodizing plants

# Investigation Approach

- Air monitoring surveys
  - Use of portable samplers
  - Many sampling locations within a small area
  - Combine with observations and wind information
- Review information for next steps
  - Look at other areas
  - On site measurements
  - Compliance action (if necessary)
- Coordinate with other stakeholders



# Airborne Hexavalent Chromium Monitoring in Compton



- Samples are collected once every three days and analyzed at SCAQMD laboratory
- Over **500** samples collected from **11** monitoring locations
- Results are posted on SCAQMD's website: [www.aqmd.gov](http://www.aqmd.gov)

# Summary of Average Hexavalent Chromium June 2017 – February 2018



# Challenges and Efforts to Address Them

## Challenge

Higher than typical levels are not observed consistently

## Efforts to Address

Looking at different types of data:

- Wind
- Various operational activity
- Complaint information

# Challenges and Efforts to Address Them

## Challenge

Difficult to identify sources located close to each other

## Efforts to Address

Using multiple tools to evaluate:

- Multi-metals measurements
- On-Site measurements
- Inspections
- Air flow
- Mobile monitoring

# Challenges and Efforts to Address Them

## Challenge

Hexavalent chromium may be emitted from other sources

## Efforts to Address

- Studies to evaluate other potential sources:
- Collaboration with universities
  - Pilot study at SCAQMD
  - Real-time mobile monitoring

# Summary and Next Steps

- Higher levels of hexavalent chromium have been observed near some industrial facilities in Compton
  - Not consistently high
  - Levels expected to drop off quickly further from the source
- Continue air monitoring
  - Expand monitoring to nearby schools
  - Consider other tools to assist with evaluation

# Summary and Next Steps

- Continue to investigate potential sources of hexavalent chromium and take enforcement and other actions where needed
- Continue periodic surveillance
- Continue responding to air quality complaints
- Post updates on our website at [www.aqmd.gov](http://www.aqmd.gov)

# We Rely On You

Please report any air quality concerns

## **SCAQMD Telephone Hotline**

1-800-CUT SMOG  
(1-800-288-7664)

## **SCAQMD Website**

[www.aqmd.gov](http://www.aqmd.gov)

## **SCAQMD Smartphone Application**

Available on the Apple and Android app stores.



# Questions & Answers

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