



**City of Long Beach**  
*Working Together to Serve*

**Memorandum**

Date: July 5, 2017

To: Patrick H. West, City Manager *PW*

From: Diana Tang, Manager of Government Affairs *DT*

For: Mayor and Members of the City Council

Subject: **Report on Impacts of Paramount Air Quality to Long Beach Residents**

On February 14, 2017, the Long Beach City Council requested the City Manager to work with the South Coast Air Quality Management District (AQMD) to determine potential health, safety, and/or environmental impacts to Long Beach residents caused by the high levels of hexavalent chromium recently found in the City of Paramount, and report back to the City Council.

Staff contacted the AQMD with a request for information on February 15, and additionally followed up with the AQMD via a conference call on March 15 to review preliminary information gathered by the air quality district. For your information, the AQMD's written responses pertaining to questions raised by the City Council are attached.

As part of the AQMD's ongoing hexavalent chromium air monitoring activities in Paramount, the agency has added new air quality monitoring sites near the Long Beach/Paramount border, as well as within the City of Long Beach. These new locations, sites 29, 30, 31 and 32 were added after the City Council's action in February 2017. They are located at 69<sup>th</sup> Street and Downey Avenue, as well as near the Union Pacific Railroad right of way and 70<sup>th</sup> Street.

The City of Long Beach is tracking data collected by the AQMD at these monitoring locations to build a profile of businesses in the area as a proactive measure. We are also conducting our own fire and health inspections to the extent that the City's authority allows. Staff will provide additional information as it becomes available.

If you have any questions, please contact Diana Tang at (562) 570-6506 or [Diana.Tang@longbeach.gov](mailto:Diana.Tang@longbeach.gov).

cc: Charles Parkin, City Attorney  
Laura L. Doud, City Auditor  
Tom Modica, Assistant City Manager  
Kevin Jackson, Deputy City Manager  
Amy Bodek, Director of Development Services  
Kelly Colopy, Director of Health and Human Services  
John Gross, Director of Financial Management  
Rebecca Jimenez, Assistant to the City Manager  
City Clerk (Ref. File # 17-0099)



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

June 20, 2017

Pat West  
City Manager  
City of Long Beach  
333 W. Ocean Blvd.  
Long Beach, CA 90802

RE: Concerns of the Paramount Air Toxics Investigation

Dear Mr. West

This letter is in response to the concerns expressed by the City of Long Beach regarding the potential impacts on Long Beach residents of our investigation of air toxics in the City of Paramount.

**- What is chromium six and what is AQMD's role in working with/monitoring the substance?**

Hexavalent chromium, also known as chromium 6 (Cr6), is the toxic form of the metal chromium. While some less toxic forms of chromium occur naturally in the environment (soil, rocks, dust, plants, and animals), hexavalent chromium is mainly produced by industrial processes. Inhaling hexavalent chromium for long periods of time can increase the risk of certain cancers (lung and nasal cancers) and can cause non-cancer respiratory health effects. People can also be exposed to hexavalent chromium through eating or drinking contaminated food or water, or through direct skin contact.

Hexavalent chromium is regulated as a toxic air contaminant, and the SCAQMD has several regulations that control these emissions from facilities, such as Rule 1404 for hexavalent chromium from cooling towers, Rule 1469 for hexavalent chromium electroplating and anodizing, Rule 1469.1 for hexavalent chromium spraying operations. In addition, the SCAQMD has three "umbrella" toxics rules that address all toxic air contaminants, including hexavalent chromium. Rule 1401 requires that new, modified, or relocated permitted equipment meet specific health risk thresholds, Rule 1401.1 requires new permitted equipment or permitted equipment at a relocated facility that is near a school to meet more stringent health risk thresholds, and Rule 1402, which also implements the AB2588 Toxic Hot Spots Program, establishes requirements for certain existing facilities to prepare Health Risk Assessments, and possibly conduct public notification and risk reduction depending on the estimated toxic risk level from the Health Risk Assessment. In addition, the SCAQMD can use public nuisance authority

*Cleaning the air that we breathe...*



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

June 20, 2017

Pat West  
City Manager  
City of Long Beach  
333 W. Ocean Blvd.  
Long Beach, CA 90802

RE: Concerns of the Paramount Air Toxics Investigation

Dear Mr. West

This letter is in response to the concerns expressed by the City of Long Beach regarding the potential impacts on Long Beach residents of our investigation of air toxics in the City of Paramount.

**- What is chromium six and what is AQMD's role in working with/monitoring the substance?**

Hexavalent chromium, also known as chromium 6 (Cr6), is the toxic form of the metal chromium. While some less toxic forms of chromium occur naturally in the environment (soil, rocks, dust, plants, and animals), hexavalent chromium is mainly produced by industrial processes. Inhaling hexavalent chromium for long periods of time can increase the risk of certain cancers (lung and nasal cancers) and can cause non-cancer respiratory health effects. People can also be exposed to hexavalent chromium through eating or drinking contaminated food or water, or through direct skin contact.

Hexavalent chromium is regulated as a toxic air contaminant, and the SCAQMD has several regulations that control these emissions from facilities, such as Rule 1404 for hexavalent chromium from cooling towers, Rule 1469 for hexavalent chromium electroplating and anodizing, Rule 1469.1 for hexavalent chromium spraying operations. In addition, the SCAQMD has three "umbrella" toxics rules that address all toxic air contaminants, including hexavalent chromium. Rule 1401 requires that new, modified, or relocated permitted equipment meet specific health risk thresholds, Rule 1401.1 requires new permitted equipment or permitted equipment at a relocated facility that is near a school to meet more stringent health risk thresholds, and Rule 1402, which also implements the AB2588 Toxic Hot Spots Program, establishes requirements for certain existing facilities to prepare Health Risk Assessments, and possibly conduct public notification and risk reduction depending on the estimated toxic risk level from the Health Risk Assessment. In addition, the SCAQMD can use public nuisance authority

*Cleaning the air that we breathe...*

under District Rule 402 and California Health and Safety Code section 41700 to address situations where chrome emissions are causing unacceptable health risks to the public. In the SCAQMD monitoring network, hexavalent chromium levels are measured at two locations as part of an ongoing U.S. EPA program to measure air toxics. As part of the Multiple Air Toxics Exposure Study (MATES) conducted periodically, this network is expanded over a period of a year. In the Paramount area, SCAQMD staff has been conducting air monitoring for hexavalent chromium and other metal air pollutants as part of an ongoing investigation to identify and address substantial sources of this pollutant. The investigation has also included significant compliance and enforcement activities and coordination with several other agencies.

**- What, if any, impacts have there been on North Long Beach from the chromium six issues in Paramount?**

Two additional monitors were deployed in May 16, 2017 near the corner of Downey Avenue and 69<sup>th</sup> Street (Sites 29 and 30), which is near the border of Long Beach and Paramount. As of 5/23/17, there were only two data points for Sites 29 and 30. Additional data is needed to better understand the hexavalent chromium levels at these two locations.

The SCAQMD has deployed over 20 hexavalent chromium monitors at different times and locations within the city of Paramount as part of the recent Paramount investigation. Monitors in the city of Paramount have been conducted about 200 feet north of the city border on Vermont Street, just north of 70th Street, near a residential neighborhood (Site 20 on below map). Several additional monitors have also been sited in an industrial area just west and north of this area, consistent with the primary focus of using monitoring to help identify the source of emissions.

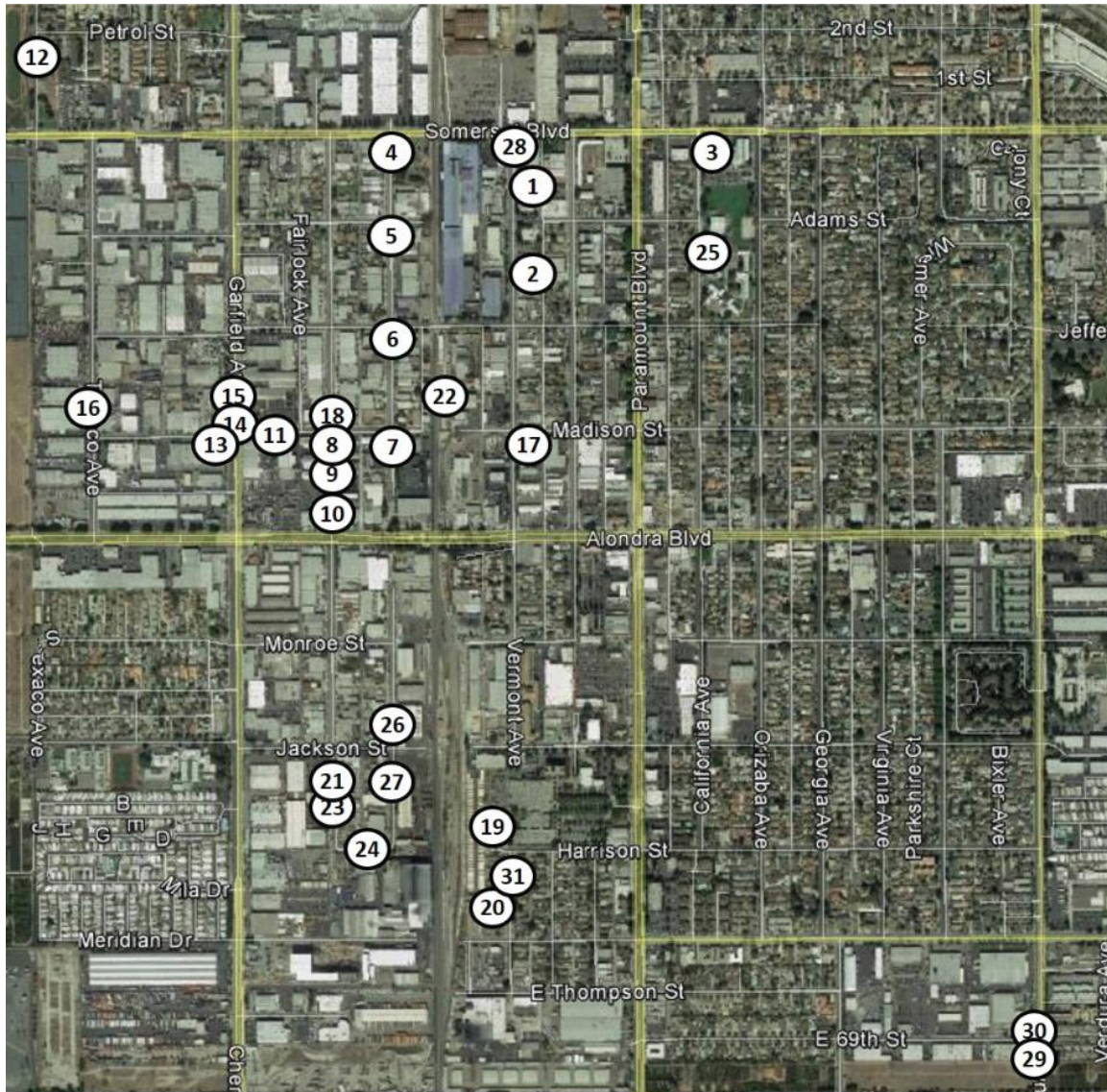
The average level of hexavalent chromium found at Site 20 is approximately 0.32 ng/m<sup>3</sup>. These levels are much lower than levels that have been reported for locations much closer to sources of hexavalent chromium. As with most sources of pollution, monitoring in Paramount has found the highest levels of pollutants closest to the source, with rapid reduction in exposures as one moves away from the facility. For example, early data has found an approximate five-fold reduction in hexavalent chromium levels about five hundred feet from two identified sources in Paramount. Because neighborhoods in North Long Beach are located farther from the sources of hexavalent chromium than the monitors in Paramount, hexavalent chromium levels in Long Beach are expected to be lower than those found at Site 20. Note that prevailing winds in the area generally blow from west to east, and thus Long Beach neighborhoods are generally not downwind of the Paramount industrial areas.

While the levels of hexavalent chromium at site 20 are still above annual average regional background levels, hexavalent chromium levels were assessed as part of

*Cleaning the air that we breathe...*



MATES IV in 2012 to 2013 (<http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/d-appendix.pdf?sfvrsn=7>) at two sites in the Long Beach area and the annual average of .03 and .04 ng/m<sup>3</sup>. These two MATES IV monitoring sites in Long Beach were located at 2425 Webster Avenue and at 3648 N. Long Beach Boulevard. In addition, other studies by SCAQMD consistently show that the largest air pollution impacts and toxic risk in North Long Beach are due to exposure to diesel emissions.



*Cleaning the air that we breathe...*

**- If there have been impacts, what are the next steps for mitigating those impacts?**

As stated above, the monitoring shows that the most serious risks are limited to the areas very close to the facilities known to be emitting hexavalent chromium. The two facilities identified as the most significant contributors in Paramount are located north of Alondra, and they are both subject to Orders for Abatement to reduce emissions and cease certain operations if monitored levels exceed specified thresholds. To the extent these and other actions, such as Rule 1402 risk reduction requirements and new or amended rules, reduce emissions from these or any other facilities in the area, then impacts to all nearby neighborhoods will be reduced.

In December 2016 and January 2017 two Stipulated Orders for Abatement were adopted for two facilities in Paramount, Aerocraft Heat Treating Co. Inc. and Anaplex Corp. An abatement order requires a company operating out of compliance to take specific actions or to shut down its operation. This is a severe remedy normally reserved for serious violators. Stipulated Orders occur when the conditions of the order are agreed upon in advance between SCAQMD's general counsel and the facility.

The Stipulated Orders for Abatements for Aerocraft and Anaplex require hexavalent chromium operations to shut down when SCAQMD's monitors register a 3-day rolling average of one nano gram per cubic meter (1 ng/m<sup>3</sup>).

**-How many times have the facilities exceeded their permit limits?**

Overall, levels for hexavalent chromium have significantly been reduced. However, there have been a total of five exceedances of the 1 ng/m<sup>3</sup> since the adoption of the Stipulated Orders for Abatement. Aerocraft Heat Treating has been placed under curtailment once while Anaplex Corp. has been curtailed four separate occasions. There are still elevated readings in the southern portion of Paramount, SCAQMD investigation is ongoing.

**-Please describe the AQMD's new notification process to cities for notices of violation within a city's jurisdiction.**

As a result of these investigations, State leadership as well as local governments requested a way to be informed when there are issues with facilities. SCAQMD is now providing notice to cities when a facility within their city limits has been issued a notice of violation (NOV) by our agency. On a monthly basis, since April of 2017, the agency sends brief letters to City Managers/Administrators sharing which facilities within their jurisdiction received an NOV the previous month. The notice states the date the NOV was issued, the facility ID and name, address, pertaining SCAQMD rule number and what the violation was related to.

*Cleaning the air that we breathe...*

**- What type of metal shops are most at risk for the high chromium six concerns?**

Facilities that are working with hexavalent chromium where the emissions can become fugitive (such as dust that is not routed through pollution controls or is not contained within a structure). Historically, hexavalent chromium from metal plating or finishing facilities have been the greatest concern, and recent air monitoring near two metal plating facilities have shown that additional pollution controls are needed for these facilities. These facilities are currently regulated by SCAQMD Rule 1469, which staff is proposing to amend in order to tighten existing requirements to better address fugitive emissions. Other potential sources of hexavalent chromium are facilities that are melting, heat treating, or processing chromium-containing alloys such as stainless steel, as well as facilities spraying chromate-based primer coatings. SCAQMD staff is also working on Rules to address toxic pollutants from some of these processes that, previous to the Paramount investigation, were not known to be sources of hexavalent chromium emissions.

**- Are there any high-risk metal shops in Long Beach, and what is the monitoring process for these locations?**

The Paramount monitoring is a new approach and we are not aware of any high-risk facilities in Long Beach. There are three chrome plating businesses located within the city of Long Beach, which are inspected by SCAQMD on a quarterly basis. These facilities, and their most recent inspection information, are listed in the table below. All inspection reports are public record and can be obtained through completing a Public Records Act request at <http://www.aqmd.gov/contact/public-records>.

Facility Name	Address	Last Inspection Date	Disposition
Aviation Repair Solutions	1480 Canal St, LB	01/26/17	In Compliance
Fine Quality Metal Finishing	1640-17 Daisy Ave, LB	02/02/17	In Compliance
Lubeco	6859 Downey Ave, LB	03/09/17	Notice to Comply issued to correct inaccurate permit description on Oven #4. In compliance 05/17/17.

During a typical SCAQMD inspection, compliance staff will conduct a physical inspection of equipment, associated permits and related records to ensure:

- The appropriate permits have been obtained
- The permits match the equipment onsite
- The equipment is being operated in compliance with applicable:
  - Permit conditions; and
  - SCAQMD rule requirements

*Cleaning the air that we breathe...*

In closing, we hope this addresses your concerns.

Sincerely,

Derrick J. Alatorre  
Deputy Executive Officer  
Legislative, Public Affairs and Media

DJA: ds

*Cleaning the air that we breathe...*