Hexavalent Chromium in the City of Paramount - School Update



Frequently Asked Questions

Overview

Hexavalent chromium, also known as chromium-6, is a metal used in certain industrial processes, such as metal plating, leather tanning, and welding. While exposure to chromium-6 generally does not lead to immediate health symptoms, breathing chromium-6 at high levels over many years can cause or worsen breathing problems such as asthma, and cause irritation to the nose, throat, and lungs. Chromium-6 is a known human carcinogen, and exposure to high levels over many years may increase the risk of lung and nasal cancers.¹

In late 2016, the South Coast Air Quality Management District (SCAQMD) determined that the airborne levels of chromium-6 in Paramount were much higher than other areas in the Los Angeles region. Since then, the SCAQMD, the California Air Resources Board, and other local agencies have been investigating sources of chromium-6 in Paramount and taking steps to strengthen environmental regulations. Some businesses have reduced their chromium-6 emissions. However, outdoor air levels remain higher than average levels in other parts of the County because some businesses in Paramount continue to impact local air quality with chromium-6 emissions.

In 2018 and 2019, average Chromium-6 concentrations in Paramount are 0.38 ng/m³ near industrial areas, 0.32 ng/m³ near residential, and 0.24 ng/m³ near school areas. Details of the air quality investigation can be found at: http://www.aqmd.gov

What has been found in indoor air at schools?

The Paramount Unified School District (PUSD) has conducted periodic testing for chromium-6 since 2017. In September 2018, PUSD partnered with the Los Angeles County Department of Public Health (DPH) to test air and dust inside of two schools located near chromium-6 facilities, Gaines and Lincoln Elementary.

Key Points

- High levels of toxic chromium-6 were found in the air in the City of Paramount in 2016.
- Exposure to high levels of chromium-6 over long periods of time can affect your health.
- Several metal businesses have been directed by SCAQMD to reduce chromium- 6 emissions and related odors.
- Chromium-6 levels in outdoor air have improved but remain higher than average chromium-6 levels in other parts of Los Angeles County.
- Public Health advises schools to continue to implement the schools' regular maintenance program.

What has been found in indoor air at schools? (cont.)

In this instance, chromium-6 was not detected in dust samples, but was detected in air samples in two of four classrooms tested: 0.04 ng/m³ at Gaines and 0.06 ng/m³ at Lincoln. These levels are:

- below the SCAQMD long-term health risk level of 0.2 ng/m³,
- above the DTSC residential health screening level of 0.0068 ng/m³, and
- within the range of ambient levels in other areas of the region (0.04-0.11 ng/m³).

While these levels do not pose an immediate risk to health and safety, exceedance of the DTSC screening level means additional monitoring and evaluation is needed. Overall, outdoor and indoor air results indicate more work is needed to further reduce facility emissions.

What can be done to protect the health of students and staff from chromium-6?

Public Health supports PUSD in taking multiple steps to protect the health of students and staff and has advised the following to the District:

- Continue to implement the schools' regular maintenance program to maintain levels of chromium-6 at the lowest levels possible in indoor air and dust, by following best management practices for school cleaning. This includes maintenance of building controls, ventilation systems upkeep, improved air filters, and keeping windows and doors closed to the extent possible.
- 2. Continue to conduct testing for chromium-6 at Gaines and Lincoln elementary schools on a regular basis to monitor indoor air levels of chromium-6 and effectiveness of the maintenance program.
- 3. Communicate regularly to parents, school staff and other stakeholders regarding the above efforts (e.g. fact sheets, briefs, website updates, etc.).

For more information regarding the contents of this FAQ, please contact the Los Angeles County Department of Public Health, Toxicology and Environmental Assessment Branch at (213) 738-3220.

¹ Health Effects of Hexavalent Chromium. A Fact Sheet by CalEPA's Office of Environmental Health Hazard Assessment (2016). Available from: https://oehha.ca.gov/media/downloads/faqs/hexchromiumairfact111616.pdf