Office of Environmental Health Hazard Assessment

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Agency Secretary

Barrio Logan Hexavalent Chromium Health Effects Fact Sheet

- The California Air Resources Board has identified hexavalent chromium as a toxic air contaminant.

- Hexavalent chromium is a cancer-causing chemical. It has been identified in worker health studies as causing lung cancer.

- Exposure over a human lifetime (70 years) to measured **airborne** hexavalent chromium levels in the vicinity of the two chrome platers would be expected to cause not more than 33 cancer cases in a population of 1 million people (based on levels measured in February) or 150 cancer cases in a population of 1 million people (based on levels measured in December). The air monitoring data covers a total time period of less than one month, and it is not known what previous air concentrations may have been.

- To reduce long-term cancer risks, it is important that airborne hexavalent chromium levels be reduced.

- The California Air Resources Board is currently measuring the amount of hexavalent chromium contained in **soil** samples collected in Barrio Logan. The Office of Environmental Health Hazard Assessment will assess the results when they become available. There may be a small health risk if hexavalent chromium gets on the **skin** or if small amounts are **accidentally swallowed**. However the health risk from skin or oral exposure is considerably less than if the hexavalent chromium is inhaled.

- In addition, hexavalent chromium when inhaled over a period of many years can cause a variety of noncancer health effects. These noncancer health effects are not expected to occur at the measured air concentrations found in Barrio Logan, according to current scientific knowledge. These health effects include damage to the nose, blood disorders, lung disease including asthma, and kidney damage.

- Noncancer health effects can also result from hexavalent chromium on skin or small amounts in the soil that is accidentally swallowed over a period of years. The health effects would not be likely to occur unless the ingested soil contained a considerable amount of hexavalent chromium. These health effects are liver damage and relatively minor changes in blood cells.