

February 14, 2011

Michael Baes  
Pesticide and Environmental Toxicology Branch  
Office of Environmental Health Hazard Assessment  
California Environmental Protection Agency  
1515 Clay St., 16th floor  
Oakland, California 94612

Re: PHG Project, Hexavalent Chromium

Dear Mr. Baes,

Environmental Working Group (EWG) is a non-profit public health and environmental research and advocacy organization with offices in Oakland and Sacramento, California, as well as in Ames, Iowa and Washington, DC. Our staff scientists conduct research and analysis on an array of public health and environmental issues including chemical contamination of food, water, consumer products and the environment. We are writing to comment on the Office of Environmental Health Hazard Assessment's recent proposal to lower the state's public health goal for hexavalent chromium from 0.06 to 0.02 parts per billion, the better to protect children.

We have been troubled by the lack of state or federal drinking water standards for hexavalent chromium, which the U.S. Environmental Protection Agency considers a probable human carcinogen. We undertook a study to test tap water in 35 U.S. cities for the presence of this toxic contaminant. The results, released last December, ([ewg.org/chromium6-in-tap-water](http://ewg.org/chromium6-in-tap-water); pdf attached) found that 31 of 35 samples contained measurable levels of hexavalent chromium. Four of these cities were in California: Riverside (1.69 ppb), San Jose (1.34 ppb), Los Angeles (0.20 ppb) and Sacramento (0.16 ppb). These findings indicate American tap water may be widely contaminated with this potent toxic substance.

Within 72 hours of our report's release, EPA Administrator Lisa Jackson announced a four-point plan to monitor hexavalent chromium contamination in the nation's drinking water. She pledged swift action in risk assessment and regulation of this contaminant. Days later, your office released a revised public health goal for hexavalent chromium, to account for the special sensitivity of children to carcinogens. Because regulation of this extremely common contaminant is long overdue, **we urge you to put this public health goal in place immediately. As well, we urge the state to move rapidly to establish an enforceable drinking water standard for hexavalent chromium, a probable carcinogen.**

**We applaud the decision to reduce the public health goal and safeguard children's health**, an action EWG recommended in 2009, in comments submitted jointly with the Natural Resources Defense Council in response to the first public health goal. By revising the proposed downward, to 0.02 parts per billion, you are taking action consistent with criteria outlined in the preface to the

revised draft public health goal: “OEHHA shall consider potential adverse effects on members of subgroups that comprise a meaningful proportion of the population, including but not limited to infants, children, pregnant women, the elderly, and individuals with a history of serious illness.” In fact, your agency’s estimates of drinking water exposures modified by age sensitivity factors and duration adjustments for each life stage indicate 43 percent of the adjusted exposure to hexavalent chromium occurs during infancy (0-2 years).

EWG and NRDC urged OEHHA to ensure adequate protection of another sensitive population, those with medical conditions or on medications that reduce stomach acidity. Conversion of hexavalent to trivalent chromium can be impaired in individuals with low-acid stomachs, a condition brought about by several widely-used medications, including antacids and proton pump inhibitors, prescribed for gastroesophageal reflux disease, peptic ulcer disease, and chronic gastritis. Other health conditions that can result in reduced stomach acid production include pernicious anemia, pancreatic tumors, infection with *Helicobacter pylori*, mucopolidosis type IV, and some autoimmune diseases.

A susceptible subpopulation united by a variety of common to rare medical conditions faces an elevated risk from oral exposure to hexavalent chromium. We hope the revised public health goal of 0.02 ppb will protect such individuals from the effects of hexavalent chromium in tap water. We suggest that OEHHA examine this issue further during its periodic review of public health goals.

**EWG recommends that OEHHA and other agencies move quickly. Regulation is long overdue.** California is now seven years late in establishing a drinking water standard for hexavalent chromium, as mandated by the state legislature. OEHHA’s proposed public health goal is intended to help guide the California Department of Public Health in developing an enforceable maximum contaminant level for hexavalent chromium in drinking water, as defined in the California Safe Drinking Water Act. That statute specifically requires your agency to perform risk assessments and adopt public health goals for contaminants in drinking water based exclusively on public health considerations. We urge you to conclude the process by issuing a final public health goal for hexavalent chromium. The California Department of Public Health should act swiftly to establish a sound regulatory standard for this likely carcinogen.

We thank OEHHA for the opportunity to comment on its commendable revised draft public health goal. We look forward to helping develop a health-protective regulatory standard for hexavalent chromium in drinking water.

Sincerely,

A handwritten signature in cursive script that reads "Rebecca Sutton". The signature is written in dark ink and is positioned above the typed name and title.

Rebecca Sutton, Ph.D.  
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Environmental Working Group  
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