City of Glendale Water & Power

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ADMINISTRATION

February 15, 2011

Michael Baes **(mbaes@oehha.ca.gov)**
Pesticide and Environmental Toxicology Branch
Office of Environmental Health Hazard Assessment
California Environmental Protection Agency
1515 Clay St., 16th floor
Oakland, California 94612

Re: Revised Draft Public Health Goal for Hexavalent Chromium in Drinking Water

Dear Mr. Baes:

Glendale Water and Power (GWP) appreciates the opportunity to provide comments on the revised draft Public Health Goal (PHG) for hexavalent chromium (also known as chromium 6) in drinking water. Glendale Water has been dealing with hexavalent chromium in a portion of its groundwater supply. Glendale currently has two demonstration-scale studies underway to evaluate treatment for the removal of chromium 6 from raw water supplies.

GWP believes that through the entire regulatory process the California Department of Public Health will be able to set a protective and enforceable public health standard for chromium 6 in drinking water that is based on the best available scientific data. We recognize the complexity of extrapolating data from animal feeding studies to predict potential human health risks and acknowledge the assumptions and conservative approaches that must be used to extrapolate levels of a contaminant used in animal feeding studies that are hundreds if not thousands of times higher than levels found in the ambient environment. If scientists did not expose animals to extremely high levels of chromium 6 and instead exposed animals to levels similar to those found in the environment, there would be no tumors produced and no evidence of carcinogenicity.

Important to Distinguish Between PHG and MCL

We appreciate OEHHA's efforts to distinguish between a PHG and the enforceable maximum contaminant level (MCL). We are, however, concerned with the ongoing confusion in our communities and among elected officials as to what a PHG means and the mischaracterization by some who describe the PHG as a dividing line between safe and non-safe water. As OEHHA has clearly stated in several written positions, a PHG does not distinguish between safe and non-safe levels but rather is the first, albeit important, step of a process to establish an enforceable standard. Along those lines, GWP staff appreciated the recent comments of Mr. Robert Howd, OEHHA, to the Desert Dispatch newspaper regarding health effects of low levels of CrVI:

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> "Howd said the health effects of low levels of chromium 6 — such as those found in drinking water in Hinkley — are not known, but the body converts chromium 6 into chromium 3. Chromium 3 is an essential nutrient needed to break down glucose in the body. Howd said people should be safe drinking water at the levels found in drinking water wells in Hinkley and that he feels comfortable drinking water at low levels of chromium 6. Howd said he lives in San Jose, which has similar levels of chromium 6 to Hinkley."

Importance of Sensitive Sub-Populations

When OEHHA published the revised draft PHG of 0.02 ppb, the PHG document cited updated information regarding sensitive sub-populations. In the press release for the revised PHG, OEHHA states "new research has documented that young children and other sensitive populations are more susceptible than the general population to health risks from exposure to carcinogens. The changes were recommended by the peer review and reflect OEHHA's new guidelines for early-in-life exposures, which acknowledge this susceptibility." The need to incorporate OEHHA's policy on sensitive subpopulations was clearly stated by one of the peer reviewers of the 2009 draft PHG. However, these statements by OEHHA seem to imply that new research involving CrVI and sensitive sub-populations became available to OEHHA. If there is additional new information regarding CrVI and protecting the health of sensitive sub-populations, it would be helpful for OEHHA to make that information public.

Is there A Carcinogenic Threshold for CrVI?

At the same time, however, the majority of the peer reviewers of the 2009 draft PHG seemed to support a non-linear (threshold) dose response curve. While Appendix A in the December 31, 2010 draft PHG presents a discussion of the issue of a carcinogenic threshold, the information presented does not appear to directly address the question of a threshold as raised by several of the peer review comments. If available studies support the peer reviewers that CrVI exhibits a non-linear carcinogenic response (i.e., a threshold) this does not eliminate the need to regulate CrVI in drinking water, however it could result in a higher PHG.

Thank you again for the opportunity to submit these comments. GWP shares and supports the efforts of OEHHA and the California DPH to ensure that all California residents have access to clean, safe drinking water.

Very truly yours,

Dan Askenaizer, D. Env.
Senior Environmental Program Specialist
Glendale Water and Power