Testimony of the American Chemistry Council
in Response to DPH-11-005 Regulations for
Proposed Maximum Contaminant Level for Hexavalent Chromium

I am Lindsay Stovall with the American Chemistry Council, a national trade association representing companies engaged in the business of chemistry.

ACC appreciates the opportunity to comment on the proposed maximum contaminant level (MCL) for hexavalent chromium (Cr6) in drinking water.

Today, I'd like to briefly summarize the extensive written comments that we have submitted.

Generally speaking, ACC is concerned that the proposed MCL is unnecessarily stringent; does not take into account new scientific research; and the costs associated with compliance greatly outweigh any theoretical public health benefits.

We understand your department is required to use the Public Health Goal (PHG) adopted by OEHHA as the basis for establishing the risk value. However, recent studies (referred to as "mode of action" studies and described in our written comments) indicate that small intestine tumors in mice observed in the National Toxicology Program (NTP) study occur only at very high levels of Cr6 in drinking water – levels a thousand fold greater than the current California drinking water standard and much higher than any concentrations found in California drinking water. Importantly, these recent studies determined that there is a threshold for the effects in mice.

When data from both the NTP study, which was the basis for the PHG, and the mode of action studies are used to estimate a drinking water standard, any MCL lower than 210 ppb Cr6 is health protective for cancer and non-cancer effects, even for sensitive populations. Why 210 ppb? Because below that drinking water concentration, research shows that the key effect identified in the NTP study, that is, excessive intestinal cell growth, also known as cell proliferation, does not occur. If this cell growth is prevented, tumors are also prevented and will not occur.

Thus, the current California state MCL for total chromium of 50 ppb and the federal MCL of 100 ppb are well below the threshold for small intestinal cancers, even in sensitive human subpopulations.

Simply put, considering the recent research and the presence of a threshold for Cr6, the estimated theoretical cancer cases avoided per year statewide associated with this proposed

MCL are virtually zero – theoretical or actual – and the monies spent by Californians in achieving this overly protective drinking water level will not increase public health protection.

ACC is concerned that the methodology used by CDPH in preparing the cost benefit analysis is not an accurate portrayal of cost, benefits, and cost-effectiveness for this proposed MCL. Our written comments provide a detailed discussion of the errors with the cost benefit analysis, but one particular error is worth noting.

CDPH did not calculate costs and the related cancer risk reductions using the same timeframe. Although CDPH's cost benefit analysis correctly recognized that OEHHA's unit cancer risk estimate reflects risk reductions accruing over a 70-year lifetime, CDPH failed to adjust its cost benefit methodology consistent with this 70-year timeframe. That is, the full benefit associated with the proposed MCL will be achieved only after 70 years, when there is no one left in the population who has been exposed to a combination of pre- and post-treated drinking water. This methodological inconsistency, that is, only spreading costs out 70 years without spreading benefits out over the same timeframe, has significant ramifications for the calculation of benefit-costs, of which engineering costs are just a very small part.

Compliance costs to achieve minimal benefits would be passed along to California households in the form of higher water rates. These costs impact all communities. In fact, some estimates conclude that compliance costs could equal as much as 15% to 20% of household income for Californians living in communities that CDPH classifies as 'disadvantaged' and 'severely disadvantaged.'

It is clear that all of the MCLs under consideration would have significant cost impacts for many California households and businesses with minimal health benefits.

ACC supports regulatory policies that seek to further protect public health, provided that such policies are based on credible scientific information, an economic feasibility evaluation, and viable cost-benefit analyses. We encourage the Department to review and consider the detailed information that has been provided. In the end, we urge the Department to establish an MCL that is both scientifically credible and economically feasible.