

November 16, 2007

Maureen Gorsen, Director  
Department of Toxic Substances Control  
1001 I Street  
Sacramento, CA 95814

Dear Director Gorsen:

The East Bay Municipal Utility District (EBMUD), a provider of municipal water to 1.3 million customers in Alameda and Contra Costa Counties, appreciates this opportunity to comment on the Department of Toxic Substances Control's (DTSC) California Green Chemistry Initiative, which is a new program designed to cut toxic chemicals in consumer products.

This initiative is entirely consistent with the efforts EBMUD has taken to eliminate lead, a known toxicant for which there is no safe level, from drinking water plumbing. For many years, EBMUD has been using non-lead plumbing in its water distribution system. While this action has been important in reducing the amount of lead that can enter drinking water in our service area, it does not address the lead that can come from consumer plumbing products. For that reason, in 2006 EBMUD sponsored AB 1953 (Chan) to get the lead out of plumbing fixtures, thereby reducing the potential exposure to lead for all California residents. AB 1953 was signed into law by the Governor in September 2006 and, starting in 2010, only pipes, faucets, and fittings meeting AB 1953's safer 0.25% lead standard can be sold in California.

Despite the fact that 10-20% of Californians' lead exposure comes from drinking water and that the successful implementation of this new law will significantly reduce that exposure, plumbing manufacturers are resisting the change. It is our belief that there is a critical role for DTSC, through its Green Chemistry Initiative, to establish a protocol for the monitoring and compliance of plumbing products that are sold in California to ensure they meet AB 1953's safer lead standard.

### **Lead in Plumbing**

Lead is a common additive in brass and solder. The concern over high levels of lead in brass used for plumbing parts was partially addressed in the 1986 Amendments to the Safe Drinking Water Act, which restricted lead in plumbing fixtures intended to convey drinking water. The federal law defined "lead free" materials as those that contained less than 8% lead content (0.2% for solder). This unfortunate misnomer has misled many people to believe that plumbing purchased since the late 1980s has been "lead free" – when in reality, the lead content can be quite high. In fact, under the 1986 Amendments,

a typical “lead free” kitchen faucet can legally contain as much as ¼ pound of lead. During the 1990s, in response to health concerns and increasing regulations, the metals industry began to explore new products and manufacturing processes that could eliminate lead from plumbing materials. Today, alloys are available that use bismuth, selenium, or silicon in place of lead to achieve the machinability and self-sealing characteristics that lead has historically provided. At least 40 companies manufacture raw materials and plumbing components today that are non-lead and meet AB 1953’s safer standard. These materials include non-lead brass alloys, water meters, valves and fittings, ingot and rod, and consumer faucets and fittings.

### **Health Impacts of Lead**

Unlike some metals such as iron and magnesium, which are essential nutrients for the human body, lead serves no purpose in the human body. There is no such thing as a normal or safe level of lead, and it is not biodegradable. Once ingested, lead is not excreted, but tends to accumulate in the body. Young children absorb lead more readily than adults, and once absorbed it continues to accumulate in the body. Lead is stored in the bones and teeth, where it acts as a reservoir in continuous exchange with the soft tissue pools.

Numerous recent studies have demonstrated that there is NO safe level of lead in the human body. In 2005, the Centers for Disease Control (CDC) issued a statement acknowledging that there is “no ‘safe’ threshold for blood lead levels (BLLs) in young children”<sup>1</sup>. In 2007, a CDC report indicated that “evidence is mounting regarding adverse health effects from moderate and low-level blood lead concentrations” for women of childbearing age.<sup>2</sup>

Today, more than ever, the dangers of lead, even at very low concentrations, are known, and it is estimated that as much as 10 to 20% of lead exposure comes from drinking water<sup>3</sup>.

### **Green Chemistry Implementation**

Although alternatives to lead in plumbing have been identified and legislation has been enacted to establish a safer lead standard, questions still remain about how to ensure compliance with the new standard for plumbing in California. Just as we have seen with toys that are manufactured overseas, it is not sufficient to enact a safe standard and assume that it will be uniformly complied with. We must learn from the recent national experiences with lead paint in imported toys.

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<sup>1</sup> Preventing Lead Poisoning in Young Children, A Statement by the Centers for Disease Control and Prevention, August 2005.

<sup>2</sup> Lead Exposure Among Females of Childbearing Age – United States 2004. Centers for Disease Control and Prevention, April 2007.

<sup>3</sup> Lead in Drinking Water, Basic Information. US Environmental Protection Agency, August 2006.

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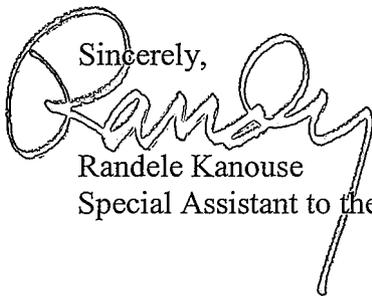
Mechanisms will be needed to ensure that, in the future, products that are required to meet the new, safer lead standard will in fact meet this standard. Since the 1990s, most faucets sold in the United States have been imported from overseas. Although outsourcing can reduce costs, it has presented serious quality control issues for some outsourced products, as has been demonstrated in the numerous recalls of lead contaminated products in the past few months.

A system that includes regular inspections and spot check of plumbing materials sold at retail would provide a method for verification that California public health standards are being complied with.

It is critical that State regulators, including DTSC and the Department of Public Health, work together to fully implement and enforce the law by working cooperatively with independent certification agencies to develop rigorous testing and certification processes in a timely manner. Cooperation is necessary to provide prompt implementation and to protect public health.

EBMUD commends DTSC for its efforts to promote the Green Chemistry Initiative. We believe lead in plumbing is the type of issue this initiative is intended to address. We request that DTSC include lead in plumbing as an issue that is addressed within the initiative. We stand ready to work closely with you to help ensure that lead is removed from plumbing through the prompt and proper implementation of AB 1953's safer lead standard.

Sincerely,

A handwritten signature in black ink, appearing to read "Rande Kanouse". The signature is written in a cursive style with a large initial "R" and a long, sweeping tail that extends downwards and to the right.

Rande Kanouse  
Special Assistant to the General Manager

RK:PGS:rj