November 24, 2008

US Environmental Protection Agency
Office of Water Docket (Mail Code: 2822T)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Ref: Docket EPA-HQ-OW-2008-068

Dear Sirs/Mmes:

In the October 10, 2008 Federal Register EPA made a preliminary determination that not enough people in the United States are exposed to significant levels of perchlorate in public drinking water systems to merit the issuance a national primary drinking water regulation. This is one of the most disappointing and convoluted EPA documents that I have ever reviewed.

To reach that conclusion, it proposes to specify a health reference level of 15 parts per billion (ppb) based on its current reference dose of .7 micrograms per kilogram per day and a calculation of dietary sources of perchlorate other than drinking water. As other commenters have explained, EPA has failed to recognize that this health reference level exposes young children to levels of perchlorate above the reference dose.

More important, though it draws upon the work of the Centers for Disease Control to profile perchlorate exposures in the population, it dismisses one of its key findings: In 2006 Blount et al found that women with low iodide levels (over a third of the female population) experience decreased thyroid functions at low perchlorate exposures characteristic of much of the U.S. population. That effect could seriously impair the development of fetuses carried by such women.
But EPA states that Blount did not establish a causal relationship. That is, other factors—such as exposure to nitrates or thiocyanate, might be influencing thyroid function. It wrote, “It is also not known whether the association between perchlorate and thyroid hormone levels is causal or mediated by some other correlate of both.”

That is, EPA recognizes that there is a major threat to public health, but it refuses to take action because there is a chance that the association between perchlorate and decreased thyroid function might be caused by another, unknown chemical compound. Yet EPA promises no action to track down and investigate that mysterious cause. This is unconscionable!

This reminds me of O.J. Simpson’s criminal defense. He insisted that some third party or parties killed his wife and Ronald Goldman, but he showed little interest in finding the unknown perpetrators.

If EPA were serious about protecting the health of America’s children, it would move forward with plans to develop a legal standard for perchlorate in drinking water. In the course of that effort, it should consider how other contaminants might contribute to the problem.

Finally, over the past decade, our understanding of the perchlorate threat has changed. Large sources of perchlorate pollution, associated with rocket-fuel production and other industrial activity, remain. However, it appears that perchlorate exposure is widespread at low levels also because of natural, agricultural, and incidental sources. To develop a public health strategy that addresses such exposures, we need a drinking water standard that requires the sampling of our water supplies at the low levels found to be a potential problem by the Centers for Disease Control. Even if it turns out that other factors—such as low iodine consumption—play a key role in the manifestation of thyroid dysfunction, such sampling is essential to protect the health of our children for decades to come.

Sincerely,

(submitted electronically)

Lenny Siegel
Executive Director