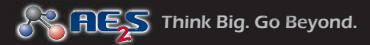


The Update

May 2010



Perchlorate Update

Perchlorate, commonly found in nature as well as fireworks and rocket fuel, has been found to reduce iodine uptake by the thyroid and cause mental deficits in children born to women who had iodine deficiencies while pregnant. The recommended Reference Dose (RfD) by the National Academy of Sciences (NAS) is a level corresponding to a drinking water equivalent level of 24.5 micrograms/Liter ($\mu\text{g/L}$).

Numerous bills have been introduced to Congress that would require the US Environmental Protection Agency (USEPA) to regulate perchlorate in drinking water. A final regulatory determination is still under review; however, the USEPA issued an Interim Health Advisory level of 15 $\mu\text{g/L}$ while they review data.

A new report by the USEPA's Office of Inspector General (OIG) has concluded that it would be better to correct dietary iodine deficiencies than regulate the amount of perchlorate in drinking water. The OIG recommends that USEPA use more modern techniques for evaluating health hazards to reduce uncertainty over the public health risk posed by perchlorate. OIG feels the USEPA is relying on an "outdated single chemical risk assessment approach", that "fails to address known sources of scientific uncertainty, which lowers the confidence in the perchlorate RfD." The OIG states, "EPA derived the perchlorate RfD from a nonadverse biological effect instead of an adverse effect."

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The Safe Drinking Water Act (SDWA) was amended in 1996 to require the USEPA to establish criteria for a program to monitor unregulated contaminants and identify up to 30 contaminants to be monitored every five years. The program is intended to collect data for contaminants suspected to be present in drinking water that do not currently have health-based standards set under the SDWA.

Unregulated Contaminant Monitoring Regulation 3

The USEPA identified and published 26 unregulated contaminants for the first Unregulated Contaminant Monitoring Regulation (UCMR 1) in 1999. Monitoring under UCMR 1 occurred from 2001 through 2005. UCMR 1 established a tiered monitoring approach requiring all public water systems (PWSs) serving more than 10,000 people and a representative sample (800 systems) of PWSs serving 10,000 people and less to monitor for the unregulated contaminants. In 2007, the USEPA identified and published 25 contaminants to be monitored from 2007-2010.

In April of 2010, the USEPA released plans to monitor for 30 contaminants under UCMR 3. Twenty-four of these contaminants are on the third Contaminant Candidate List (CCL3) that was finalized in September of 2009. The plan includes required monitoring beginning in 2013 for 22 unregulated contaminants, a Screening Survey for six perfluorinated alkyl acids, and specialized research for 2 microbials. The 22 contaminants required for monitoring consist of seven hormones; 1, 4 dioxane; nine volatile organic compounds (VOCs); four metals; and chlorate.

The UCMR 3 will most likely require consecutive systems to monitor as well, despite being exempt from past monitoring requirements. The system size will be based on retail service population rather than on retail and wholesale service population. Aside from that change, UCMR 3 will follow the same general regulatory framework as UCMR 1 and UCMR 2.

More information can be found at <http://www.epa.gov/safewater/ucmr/index.html> or by contacting AE2S. AE2S will continue to follow this topic as more information becomes available.

WEF Survey

The Water Environment Federation (WEF) is requesting assistance from wastewater treatment operators and city staff to participate in the WEF House of Delegates (HOD) Operator Outreach Workgroup's Wastewater Treatment Plant and Collection System Personnel Survey. The survey gathers information about the types of services that operators find valuable and their

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The OIG performed a cumulative risk assessment and determined: 1) the risk from each of the stressors is not equal (perchlorate is one of four stressors that inhibit the iodine uptake); 2) the USEPA's RfD is conservative and further reducing the perchlorate exposure below the RfD does not lower the risk; 3) increasing maternal iodide intake will reduce the frequency and severity of permanent mental deficits in children; and 4) correcting moderate iodide deficiency is the most effective approach for reducing the risk.

More information and the report can be found at <http://www.awwa.org/publications/StreamlinesArticle.cfm?itemnumber=54368>. AE2S will continue to follow this topic as more information becomes available. ■

(WEF Survey from first page)

relationship with WEF and its Member Association (MA). The survey also assists WEF in prioritizing the development of training products under the WEF Distance Learning Program.

The survey can be found at <http://www.zoomerang.com/Survey/WEB22AB4RML56Z> or a hard copy can be mailed or emailed to you. The survey will close on June 1, 2010. More information on the WEF Distance Learning Program, including course listings, can be found at <http://training.wef.org/> or by contacting AE2S. ■

National Drinking Water Week

National Drinking Water Week was May 2-8 this year. The American Water Works Association (AWWA) focused on four main topics to relay important issues in the drinking water industry. These issues included: Workforce – encouraging students and job seekers to explore careers in the water sector; Know Your Water – urging consumers to understand their water supply from treatment to quality; Security – encouraging the public to play a role in keeping our water supplies and systems secure from things such as vandalism, terrorism, and contamination; and Protecting Source Waters – protecting our source waters from fertilizers, oil, detergents, medications, and other contaminants.

More information can be found at <http://www.awwa.org/Government/content.cfm?ItemNumber=44766&navItemNumber=3863> or by contacting AE2S. ■

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