

EPA must consider the public health, regulatory and media implications of each of its steps related to perchlorate regulation.

Coordinated federal agency review is critical. Rushing forward – even on notice - without adequate input from other agencies will have adverse public health consequences, and unintended negative effects on all drinking water regulatory programs, and on voluntary, state, and Federal cleanup efforts.

POTENTIAL ADVERSE PUBLIC HEALTH CONSEQUENCES

Media-generated “health scares” based on misconceptions of new studies or unclear understanding of regulatory objectives usually create a false perception of risk and lead to worse dietary choices. There have been numerous “health scares” in the media during EPA’s review of perchlorate.

- **Milk:** Since milk is likely to contain low perchlorate levels, parents may question milks’ safety and choose other beverages to the health detriment of older children.
- **Fruits and Vegetables:** USDA and FDA recommend a diet rich in fresh fruits and vegetables for children and adults despite detection of perchlorate in these foods. Food scares, with fruits and vegetables under scrutiny, would drive consumers to foods with less nutritional value and would reduce public health.
- **Child Nutrition:** Consider impacts of a drinking water health advisory that is below what can be reliably detected in tap water-one which puts public confidence at risk for all foods, including human breast milk. For example, concerned mothers may simply abandon breastfeeding. Without adequate guidance, calls may flood pediatrician offices. Health care professionals will need to be equipped to help parents make the right choices.

IMPLICATIONS FOR OTHER DRINKING WATER STANDARDS, ADVISORIES AND CLEANUP

Proposing an unnecessarily low health advisory based on particular subpopulations would be a dramatic departure from current drinking water policy.

- In the Clinton Administration, EPA specifically rejected arguments for setting Maximum Contaminant Level Goals (MCLG’s) based on body weight/drinking water consumption of pregnant women or infants for chlorite and chlorine dioxide. Like perchlorate, the reference dose for chlorite and chlorine dioxide already included consideration of infants and other sensitive populations.
- Changing the approach for perchlorate would raise the question of why EPA does not revise *all* Maximum Contaminant Levels (MCLs) to the concentration equivalent to infant exposure assumptions.

CLEANUP DELAYS

Previous changes to EPA's draft reference dose and interim standards have caused delays in remediation projects. Clear guidance to states and EPA regions is critical for other cleanup projects to move forward.

COORDINATED FEDERAL AGENCY REVIEW: RIGOROUS AND TRANSPARENT

- HHS agencies should provide clear guidance on the safety of breastfeeding and guidance to parents of young infants and to medical practitioners.
- FDA should update its perchlorate guidance for food and reassure the public of the safety of food supplies. If infant health is of particular concern, FDA's guidance should address the importance of infant nutrition.
- USDA should provide comparable guidance in its food safety regulatory programs.
- USTR should coordinate a message to major US trading partners to minimize the impact on US exports.
- EPA should reaffirm that its cleanup guidance for perchlorate remains in effect while EPA receives public comment and considers a final determination.

PERCHLORATE SCIENCE: A RELIABLE SAFETY NET AGAINST PREDICTABLE, ADVERSE PUBLIC HEALTH AND POLICY CONSEQUENCES.

- Five decades of scientific investigation, including National Academy of Sciences (NAS) review, are clear and consistent: low levels of perchlorate are not dangerous to public health.
- NAS: Adverse effects from perchlorate are only *proposed* at high levels and have not been demonstrated in humans.
- NAS: All sensitive subpopulations, including infants, would be protected by the drinking water equivalent of EPA's reference dose, 15 parts per billion (ppb).
- Since 2005, no credible, peer-reviewed studies have found adverse health effects from environmental levels of perchlorate, including the CDC study in early 2009.
- Perchlorate is found naturally throughout the water environment in the 0.5 to 15 ppb range. USGS and other researchers have measured perchlorate in rain, geologic formations, and rivers and aquifers throughout the United States.

Perchlorate warning intended to panic breast-feeding moms

Organic food, bottled water no better

By DENNIS T. AVERY
KNIGHT RIDDER/Tribune News Service

Scare-mongering is an ugly practice — especially when the scare-mongers are willing to risk babies' health to falsely indict modern science and technology.

The latest scare is that women are picking up a chemical called perchlorate — used as primary ingredient in rocket fuel — and transmitting it to their infants through their breast milk. Even the milk samples of cows from across the country, the scare-mongers charge, were mostly "contaminated" with perchlorate.

No mother wants her little baby to explode from drinking rocket fuel. So should she stop breast-feeding her infant? Should she replace mother's milk with cows' milk? Way too dangerous, say the eco-activists, who came up with this latest exercise in public relations panic. So what to do? Give them synthetic formula instead?

In reality, perchlorate is a natural compound, found

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all over the world in certain types of rock deposits. This was the first scientific search for traces of perchlorate in milk, and the broad "contamination" of both breast milk and cows' milk across the country probably means that most milk has carried traces of perchlorate since before the Stone Age.

Fortunately, perchlorate is not a poison. At normal exposures, perchlorate poses no health risk.

At extremely high doses, perchlorate can limit our uptake of iodide. This could be harmful because iodide is necessary for child development and for proper thyroid functioning in adults. However, high-dose iodide shortage can be remedied if breast-feeding mothers take nutritional supplements, use iodized salt and eat more seafood.

Iodide supplements would be a good idea anyway; researchers say pregnant women generally are getting only about half as much dietary iodide today as they did in the 1970s.

The problem with switching babies from breast-feeding to formula is that all the studies say breast-fed babies are healthier than formula-fed babies.

Dr. Jack Newman, a Fellow of Canada's Royal College of Physicians says

all milk is full of dozens of natural toxins. Yet breast-fed babies do better on cognitive and neurological tests than formula-fed babies in virtually every test. And, says Dr. Newman, breast-fed babies have more mature immune systems than formula-fed babies. Breast-fed babies also have a lower incidence of certain cancers later in life than formula-fed babies.

One of the activists calling for tougher limits on perchlorate is Renee Sharp, a biologist with the Environmental Working Group, an activist organization in Washington.

As it happens, the EWG gets donations from the Trial Lawyers Association. EWG scares helped Erin Brockovich get millions of dollars by claiming that her town's water was poisoned by a corporation — even though the townspeople had no identifiable symptoms of poisoning.

The EWG also is big on claiming that our fruits and vegetables contain unsafe levels of pesticide residues. That's to frighten mothers into the expensive organic food stores that also support EWG.

The organization counts on the powerful gas chromatographs and mass spectrometers that can now detect "toxins" at tiny trace levels in most of our foods, organic or not. So they illogically claim that non-organic food is dangerous.

Wonder how they'll spin it now that perchlorate is testing highest in organic veggies.

Traces, however, are rarely dangerous to people. The dose makes the poison, and 1 part per million is equal to one second in 11 days. Those parts per billion of perchlorate are each equal to one second in 32 years. Unless consumers understand the importance of dose, the scaremongers win.

It would be tragic if mothers were frightened away from breast-feeding by a scare campaign over a natural compound that's apparently found in virtually all milk, all over the world.

As a matter of fact, perchlorate traces are even found in bottled water. That means there's no way to get perchlorate-free water with which to mix formula.

That's how ridiculous the perchlorate scare campaign is. Use iodized salt — always a good idea — and forget about this latest attempt to set the stage for yet another enrichment of already wealthy personal injury lawyers.

Dennis T. Avery is a former State Department agriculture analyst and a Senior Fellow at The Hudson Institute (www.hudsoninstitute.org), a nonpartisan think-tank with offices in the nation's capital. Readers may write him at Hudson, 1015 18th Street NW, Suite 300, Washington, D.C. 20036.