

Perchlorate studied in food and beverages

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A Western Massachusetts association of water suppliers is urging the state to carefully consider all possible sources of perchlorate, including food, as they set a safe drinking water standard for the chemical.

With a week left in the public comment period for the state's proposed 2 parts per billion drinking water and hazardous waste standards for perchlorate, the state Department of Environmental Protection has received mostly kudos from clean water advocates on its plans.

If it is approved, Massachusetts would be the first state to set such a standard.

Perchlorate, found in rocket fuel, fireworks and other explosives, has been found in groundwater flowing under the Massachusetts Military Reservation on the Upper Cape. The chemical, when ingested, interferes with the thyroid, which regulates metabolism in adults and development in children.

Perchlorate has been found in drinking water supplies in about three dozen states, but state and federal regulators have yet to fully examine its pervasiveness in food.

The Defense Department, which is a major consumer of perchlorate, proposed a 24 parts per billion cleanup standard for its military installations in January. Department officials, who have suggested perchlorate can be safely ingested in much higher amounts, have not yet commented on the proposed Massachusetts standard.

If adopted, the proposed state standard would dictate the level to which perchlorate polluters must clean tainted soil and water. About eight plumes of perchlorate are flowing through the aquifer under the Massachusetts Military Reservation in concentrations of up to 700 parts per billion. The aquifer is the largest source of drinking water on the Cape.

The state recommended the 2 parts per billion standard - one of the lowest in the nation - in part because of uncertainty surrounding how much perchlorate is ingested through food. The standard considers that only 20 percent of a person's overall consumption of perchlorate comes from drinking water.

The federal Food and Drug Administration found perchlorate in lettuce up to 29 parts per billion and in milk up to 11 parts per billion in 2004. A second round of testing will evaluate corn meal, oat meal, and several vegetables and juices.

Food and perchlorate

Foods that have tested positive for perchlorate: milk and lettuce

Foods to be tested by the FDA: corn meal, oat meal, spinach, carrots, cantaloupes, tomatoes, broccoli, oranges, orange juice, apples, apple juice, grapes

The FDA is trying to determine how the food became tainted. It could be from plants irrigated with water containing perchlorate or through exposure to perchlorate-laced fertilizer, according to the FDA Web site.

With Massachusetts water suppliers being asked to meet such strict standards, they are asking the state to be just as strict with food that may contain perchlorate.

Public water suppliers must notify residents when perchlorate is found in the water above the reporting limit of 1 part per billion. But foods are not currently tested for perchlorate.

"We just want to be on the same playing field," said John Sasur Jr. of the Western Massachusetts Waterworks Association, who submitted a letter to the state on behalf of the association. "People have to realize you have to be concerned about all the sources." In his letter, Sasur said a drinking water standard is "premature, improper and ineffective in addressing the overall contamination problem that affects all the citizens of the Commonwealth."

Massachusetts tested bottled water from 50 bottling companies in 2004 and found no products with detectable levels of perchlorate. Officials from the Department of Environmental Protection and Department of Public Health said there are no plans to expand testing or to label foods that may contain perchlorate.

"They have tested bottled water. It would seem prudent, if this is a toxic pollutant, that DEP or DPH would at least look into testing the things coming into the Commonwealth," said Dan Mahoney, head of both the Sandwich Water District and the Upper Cape Water Cooperative.

The comment period ends at 5 p.m. May 12. The standards could become law before the end of the year.

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