271 DM3
Projet de restauration de la berge bordant le site d'une ancienne usine de ferromanganèse à Beauharnois
Annexe 4 6211-02-027

Publié le 21 septembre 2010 à 07h15 | Mis à jour à 07h17

Trois villes s'attaquent au manganèse dans l'eau potable



Les enfants buvant une eau ayant 225 microgrammes par litre de manganèse avaient un QI 6,2 points moins élevé que les enfants buvant une eau ne comportant presque pas de manganèse.



Mathieu Perreault
La Presse

Trois municipalités du Centre-du-Québec ont récemment installé un dispositif d'enlèvement du manganèse de l'eau potable, dans la foulée de l'étude montrant que ce métal peut inhiber le développement des enfants.

Cette étude montréalaise, publiée hier dans la revue *Environmental Health Perspectives*, montre que les effets sur le quotient intellectuel surviennent bien avant la limite de 300 microgrammes par litre jugée sécuritaire par l'Organisation mondiale de la santé. Les enfants buvant une eau ayant 225 microgrammes par litre de manganèse avaient un QI 6,2 points moins élevé que les enfants buvant une eau ne comportant presque pas de manganèse.

«Nous avons fait des réunions avec les chercheurs et la population dans les villes où a été faite l'étude», indique René Veillette, de l'Agence de santé et de services sociaux de Chaudière-Appalaches. «Deux des trois villes ont choisi d'installer des équipements d'enlèvement du manganèse.» Une autre municipalité, du Centre-du-Québec, a aussi installé un tel appareil, selon René Lord de l'ASSS de Trois-Rivières et du Centre-du-Québec.

Mais l'une des trois municipalités avait déjà l'intention d'installer l'équipement d'enlèvement du manganèse. «Pour nous, c'était une question esthétique», explique Pierre Routhier, inspecteur à la Ville de Sainte-Agathe-de-Lotbinière. «Depuis qu'on met du chlore dans l'eau, le manganèse tache les vêtements. Ça n'a pas rapport avec l'étude.» L'appareil de Sainte-Agathe-de-Lotbinière a coûté 55 000$ et a permis de réduire de 2200 à 450 microgrammes par litre la quantité de manganèse dissous.

Santé Canada a d'ailleurs un objectif «organoleptique» de 50 microgrammes de manganèse par litre d'eau potable.

Recommander Une personne recommande ça.

publicité

© 2000-2010 Cyberpresse inc., une filiale de Gesca. Tous droits réservés.

Manganese in water linked to lower IQ in children

WELL SUPPLY SHOWS HIGHER TRACES

Study examined 362 kids in Lotbinière, Central Quebec and Eastern Townships

ANNE SUTHERLAND
THE GAZETTE

'ater drawn from ground ells in Quebec often con- ins manganese, and the gher the concentration of e trace metal in that water, e lower the IQ of children ho drink it.

These are the findings of study done by researchers UQÀM, the Université de Montréal and École Polytechnique who examined 362 children age 6 to 13 and measured their intelligence quotient relative to the levels of manganese in their tap water.

The study was done in eight municipalities between June 2007 and June 2009. Hair samples were taken from the children and water from the taps to do the calculations. Standardized IQ and other tests were given by neuropsychologists.

Maryse Bouchard, adjunct professor at the Centre for Interdisciplinary Research in Biology, Health, Environment and Society at the Université du Québec à Montréal, led the study. She said the researchers were shocked at how damaging the manganese was to the intelligence of the children.

"We were surprised by the strength of the differences between children who were exposed to high levels and those who weren't," she said.

Whether reducing or eliminating manganese from the water can reverse the damage done is "a million-dollar question" and one for another study, said Bouchard, who has just applied for a grant to follow these same children in the future.

The testing was done in rural areas in the Central Quebec, Eastern Townships and Lotbinière regions. Bouchard would not name the specific towns, saying it could lead to the kids being labelled as stupid.

Half the homes were supplied by municipal aqueducts and half had backyard wells. Teams visited each home and tested the water for the metal and the children for cognitive function, memory and motor skills.

There were 10 factors, including family income and maternal intelligence, also taken into consideration.

After the study, each home was told how much manganese was in their drinking water and town meetings were held with municipal administrators to discuss the findings. Many towns already had decided to install filtration before the findings were provided.

Putting a filter that uses carbon and resins on your well water and household products like Brita pitchers will reduce the levels of manganese.

The good news for those whose tap water comes from the Montreal network is that manganese levels are negligible.

The latest analysis of wate processed by the Atwater an Charles des Baillets wate filtration plants shows leve of 0.00038 in 2009, where th Health Canada mandated ac ceptable level is 0.05.

Lise Chabot, with Mont real's public health depart ment, said that manganese i "definitely not a problem i Montreal."

What about cottagers wh have wells, Bouchard wa asked.

"If I had a country hous in the Eastern Townships, would have my water tested," she said.

asutherland@
montrealgazette.com