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## **EWG Comments on the EPA's Proposed National Primary Drinking Water Regulations for Perchlorate**

**August 26, 2019**

**Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460**

**Submitted electronically to docket EPA-HQ-OW-2018-0780**

Environmental Working Group (EWG), a nonprofit research and advocacy organization with headquarters in Washington, D.C., objects to the Environmental Protection Agency's proposed drinking water standard for perchlorate, a contaminant associated with harm to the thyroid. The EPA's proposed legal limit of 56 parts per billion, or ppb, for perchlorate in drinking water disregards the risks to children's health, ignores the latest scientific research, and fails to follow the requirements of the Safe Drinking Water Act to use the best available peer-reviewed science for setting drinking water standards.

Extensive research demonstrates that exposure to perchlorate disrupts the thyroid hormone balance, thus posing a risk to the fetus and the young child.<sup>1</sup> Fetal and childhood exposure to perchlorate can impair cognitive development, which can cause lifelong harmful consequences.<sup>2</sup> Several states have set legal standards and public-health benchmarks for perchlorate in water. The most protective regulation is in Massachusetts, which set a legal limit of 2 ppb.<sup>3</sup> In 2015, California published a public health goal value of 1 ppb for perchlorate in drinking water, which accompanies a legal maximum contaminant level of 6 ppb for perchlorate in California community water systems.

EWG is especially concerned that the EPA is considering withdrawing the agency's 2011 determination to set a national drinking water standard for perchlorate, which would be entirely inconsistent with the agency's mission to protect human health. Setting the perchlorate drinking water standard is essential. Further, given the risk of health harm from perchlorate, the EPA's proposed drinking water limit of 56 ppb is not in the interest of public health and should be replaced with a truly health-protective alternative that safeguards children's health from this water contaminant. EWG urges the EPA to

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<sup>1</sup> Ginsburg GL, Hattis DB, Zoeller RT, Rice DC. Evaluation of the U.S. EPA/OSWER preliminary remediation goal for perchlorate in groundwater: focus on exposure to nursing infants. *Environ Health Perspect.* 2007;115(3):361-9. Haddow J, Palomaki G, Allan W, et al. Maternal thyroid deficiency during pregnancy and subsequent neuropsychological development of the child. *New Engl J Med.* 1999;341(8):549-555. Steinmaus C, Miller MD, Smith AH. 2010. Perchlorate in drinking water during pregnancy and neonatal thyroid hormone levels in California. *J Occup Environ Med.* 52(12): 1217-24. doi: 10.1097/JOM.0b013e3181fd6fa7

<sup>2</sup> Steinmaus CM. 2016. Perchlorate in Water Supplies: Sources, Exposures, and Health Effects. *Curr Environ Health Rep.* 3(2):136-43. doi: 10.1007/s40572-016-0087-y

<sup>3</sup> Zewdie T, Smith CM, Hutcheson M, West CR. 2010. Basis of the Massachusetts reference dose and drinking water standard for perchlorate. *Environ Health Perspect.* 118(1):42-8. doi: 10.1289/ehp.0900635



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incorporate into its revised perchlorate standard considerations of a wide variety of neurodevelopmental risks due to perchlorate, such as changes in behavior and learning, motor development and control, and emotions – the type of adverse effects that may be independent of alterations more readily measured by IQ.

Finally, in addition to sending these comments, Environmental Working Group has co-signed and fully supports the comments on this proposed regulation which recommend for the Maximum Contaminant Level of no more than 2 ppb, and ideally at 1 ppb, as advocated by the Natural Resources Defense Council and other environmental and public health interest organizations.

Submitted on behalf of the Environmental Working Group,

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