Aug. 16, 2016

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Federal Building
1200 Pennsylvania Ave. NW
Washington, D.C.

Re: Hexavalent Chromium – Urgent Need to Set MCL

Dear Administrator McCarthy,

The Environmental Working Group (EWG) is a nonprofit research and advocacy organization with significant experience and expertise on drinking water contaminants, including hexavalent chromium. Erin Brockovich is a consumer protection advocate whose work on hexavalent chromium goes back to 1993, when she uncovered the severe contamination of drinking water in Hinkley, Calif., by hexavalent chromium from Pacific Gas and Electric Company's power plant cooling towers.

After Brockovich's work brought the contaminant to national attention, tests commissioned by EWG in 2010 found hexavalent chromium in the drinking water supplies in 31 out of 35 U.S. cities.[1] In response to these findings, and a subsequent petition by EWG and other groups, EPA added hexavalent chromium to the list of pollutants tested under the Unregulated Contaminant Monitoring Rule 3. The results of those tests revealed that hexavalent chromium contaminates drinking water supplies serving millions of Americans in all 50 states.[2] Yet the process of setting a federal Maximum Contaminant Level for hexavalent chromium in drinking water remains stalled in the Integrated Risk Information System.

We write with deep concern about this continued delay. It is clear that the delay is sowing confusion among state and local regulators, utilities and the public about how much hexavalent chromium is safe in drinking water. This confusion is resulting many Americans' exposure to unregulated levels of hexavalent chromium, which federal, state and independent scientists agree pose health hazards.

Federal regulation of hexavalent chromium is woefully inadequate. The current MCL of 100 µg/L for *total* chromium was set 25 years ago, in 1991. This MCL is badly outdated and

[1] Rebecca Sutton, Ph.D., Environmental Working Group, Chromium-6 in U.S. Tap Water (2012), http://www.ewg.org/research/chromium6-in-tap-water
[2] U.S. Environmental Protection Agency, Monitoring the Occurrence of Unregulated Drinking Water Contaminants, http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ (last visited Aug. 14, 2016).

numerous studies and reviews, including those by the National Toxicology Program[3] and the California Office of Health Hazard Assessment[4], indicate that this level is far too high to protect human health. While questions remain about what level of exposure to hexavalent chromium is safe, there is scientific consensus that the chemical is hazardous at extremely low concentrations. Yet the MCL is only for *total* chromium, not just hexavalent chromium. Hexavalent chromium or chromium-6 is far more toxic than trivalent chromium, or chromium-3, the other commonly occurring form of the chemical. Setting an MCL maximum level for these two kinds of chromium combined conflates the individual risk of each chemical and allows for legally permissible hexavalent chromium levels that do not adequately protect public health. EPA should instead set an MCL specifically for hexavalent chromium to more accurately reflect the actual level of risk posed by hexavalent chromium alone.

Since 2008, EPA has taken modest steps to re-assess the current MCL for total chromium and to monitor current levels of hexavalent chromium in some systems. EWG commented on EPA's 2010 Toxicological Review of Hexavalent Chromium[5] and the 2014 IRIS review.[6] Despite comments from numerous advocates and significant evidence that hexavalent chromium poses substantial health risks, industry delay tactics have stalled federal action. As a result, there is still neither an updated MCL for total chromium nor a specific MCL for hexavalent chromium.

In the absence of a federal standard, only California has set an enforceable legal limit for hexavalent chromium in drinking water – 10 µg/L, or tenfold lower than the federal MCL for total chromium. California's Public Health Goal – the level protective against cancer and other diseases if consumed for a lifetime – is far lower, 0.02 µg/L. EWG has criticized the California Department of Public Health for underestimating the benefits and overestimating water treatment costs in setting the drinking water standard. The MCL at 10 µg/L is inadequate to protect public health, in light of the 500-fold gap between the PHG and the MCL.[7] Nonetheless, the MCL provides unambiguous guidance to regulators, utilities and citizens on the legally acceptable level of hexavalent chromium in drinking water.

Contrast that with recent events in North Carolina, which exemplify the discord that has resulted in the absence of federal action. Last week, North Carolina's state epidemiologist, Dr. Megan

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[3] National Toxicology Program, NTP Technical Report on the Toxicology and Carcinogenesis Studies of Sodium Dichromate Dihydrate (Cas No. 7789-12-0) in F344/N Rats and B6C3F1 Mice (Drinking Water Studies), NTP TR 546 (2008), https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr546.pdf.

[4] Office of Environmental Health Hazard Assessment of the California Environmental Protection Agency, Final Technical Support Document On Public Health Goal For Hexavalent Chromium In Drinking Water (2011), http://www.oehha.ca.gov/water/phg/072911Cr6PHG.html.

[5] Letter from Rebecca Sutton, Ph.D., and Renee Sharp, Senior Scientists, Environmental Working Group, to Vincent Cogliano, Acting Director, Integrated Risk Information System, Environmental Protection Agency (Aug. 30, 2011), http://www.ewg.org/news/testimony-official-correspondence/ewg-urges-epa-protect-public-chromium-6-tap-water.

[6] Environmental Working Group, Comment Letter on EPA's Integrated Risk Information System Toxicological Review for Hexavalent Chromium (June 9, 2014), http://www.ewg.org/testimony-official-correspondence/hexavalent-chromium-carcinogenic-humans-comments-environmental.

[7] Clean Water Action, Center for Public Environmental Oversight, Integrated Resource Management, and Natural Resources Defense Council, Comment Letter on California Department of Health's Proposed Rule to Set Maximum Contaminant Level of 10 µg/L for Hexavalent Chromium (Oct. 11, 2013), http://www.ewg.org/testimony-official-correspondence/ewg-comments-california-department-public-health-proposed-chromium.

Davies, publicly resigned after seven years, due to disputes over how to limit citizens' exposure to hexavalent chromium in wells near Duke Energy's coal ash pits. Until March, well owners had been advised not to drink the well water because hexavalent chromium levels represented a risk greater than one in a million for cancer – a temporary state standard for those wells.[8] Both Davies and Ken Rudo, a state toxicologist who helped set the one in a million risk standard, have testified that they were later pressured by state officials to lower those standards, allowing the drinking water advisories to be rescinded. State officials also repeatedly denied Rudo's requests to extend the standard beyond the wells close to the coal ash pits to the entire state, claiming the standard was too cautious. The same officials allegedly told Rudo to inform citizens whose water comes from the contaminated wells that the water met all state and federal standards. While this was true, it was disingenuous and dangerous.

While Davies claimed in her resignation letter[9] that the administration is deliberately misleading the public about safe levels of hexavalent chromium, there is little that she or other concerned state officials or citizens can do under current law, as there is no federal enforceable health-protective standard to which she can point. Further, because North Carolina's guidelines are within the outdated limit set for total chromium levels, there is little room for legal recourse, even if those levels pose unacceptable risks.

States like North Carolina, where industrial byproducts like coal ash increase the risk of hexavalent chromium contamination, need a federal mandate to set strong, health-protective standards for levels of the contaminant in drinking water. Without it, states will continue to use inconsistent and potentially unsafe guidelines, and leave citizens confused about whether their drinking water is safe.

It has been 25 years since EPA set a total chromium MCL and eight years since EPA began reviewing the health effects of hexavalent chromium. A health protective MCL specific to hexavalent chromium is overdue and urgently needed. We respectfully request that you use your authority under the Safe Drinking Water Act to set this standard as soon as possible.

Sincerely,

Ken Cook
President
Environmental Working Group
Washington, D.C.

Erin Brockovich
Consumer Protection Advocate
Weitz & Lutzengberg, P.C.
Los Angeles, Calif.

[8] North Carolina Department of Environmental Quality, Final Report on the Study of Standards and Health Screening Levels for Hexavalent Chromium and Vanadium (2016) http://www.ncleg.net/documentsites/committees/ERC/ERC%20Reports%20Received/2016/Department%20of%20Environmental%20Quality/2016-April%20Study%20of%20Cr(VI)%20and%20V%20Stds.pdf.

[9] Letter from Megan Davies, MD, Epidemiology Section Chief and State Epidemiologist, North Carolina Department of Health and Human Services, to Richard Brajer, Secretary, North Carolina Department of Health and Human Services (Aug. 10, 2016), https://mgtvwncn.files.wordpress.com/2016/08/daviesresignationpdf10aug2016.pdf.