

NEWPORT NEWS WATERWORKS DEPARTMENT

HEXAVALENT CHROMIUM FACT SHEET

DATE: September 2016

BACKGROUND

Hexavalent Chromium (Cr^{+6}) is a form of the metallic element chromium. Chromium naturally occurs in rocks, animals, plants, soil and in volcanic dust gases.

There are two forms that make up Total Chromium:

- Chromium 3 (Cr^{+3}) – No evidence this form is a health risk and is an essential nutrient for the body.
- Chromium 6 (Cr^{+6}) – Water sources can be affected; as it has been demonstrated to be a human carcinogen when inhaled. Attention was brought to CH 6 by the Erin Brokovich case in California.

Newport News Waterworks is in compliance with the current regulation for Total Chromium, which has a Maximum Contaminant Level (MCL) of 0.1 mg/l or 100 ug/l.

HEALTH CONCERNS

Chromium 6 (Cr^{+6})

- Is not currently regulated individually by Environmental Protection Agency (EPA) and hence water utilities are not required to meet a minimum level of Cr^{+6} at the treatment plants or in the distribution system.
- Because a study published in 2007 by the National Toxicology Program (NTP) concluded that Cr^{+6} is a carcinogenic when ingested in drinking water, utilities and public health officials have begun to investigate the feasibility of reducing hexavalent chromium concentrations in drinking water.
- Newport News Waterworks did participate in a 2013/2014 study mandated by EPA for large utilities across the country to monitor and test for Cr^{+6} . The purpose of this study was to determine the occurrences and levels of Cr^{+6} across the county. The review of this study will determine if Cr^{+6} should be regulated and at what level. Cr^{+6} is one of 20 chemicals currently being reviewed by EPA for possible further regulation in drinking water.
- While Newport News Waterworks does not currently regularly test for Cr^{+6} , we are aware of the efforts and study being done by the Water Research Foundation. If utilities across America are mandated to test for Cr^{+6} , Newport News Waterworks will meet the mandate required by EPA.
- Currently in the state of Virginia no laboratories are certified by EPA because it is has not been deemed a contaminant.

FOR YOUR INFORMATION

Newport News Waterworks adheres to drinking water regulations set by the United States Environmental Protection Agency (US EPA) and guidance provided by the Virginia Department of Health (the regional VDH Office of Drinking Water is located in Norfolk).

Newport News Waterworks Customer Service (757) 926-1000 Monday – Friday, 8am to 5pm