

Bromoform  
CAS 75-25-2  
Carcinogen

Toxicity value

The EPA 2015 final updated criteria are based on a revised SF of  $0.0045 \text{ (mg/kg-day)}^{-1}$  derived by the Office of Water (EPA 2005). The previous SF was the value currently in IRIS ( $0.0079 \text{ (mg/kg-day)}^{-1}$ ). The 2005 OW assessment evaluated the same principal study considered in the IRIS assessment (NTP 1989), but applied more current guidance and modeling approaches. DEQ used the revised SF of  $0.0045 \text{ (mg/kg-day)}^{-1}$  to calculate the 2015 criteria.

RSC

An RSC value was not used, because the criteria are based on cancer risk.

BAF

A trophic level-weighted BAF of 7.1 was derived from the BAF values used in the EPA 2015 final updated criteria. The EPA (2015) BAF values are different from the BAF values in EPA (2014).

Previously, the 2006 Idaho criteria for bromoform, were derived using a BCF of 3.75.

Summary of previous (2006) and updated human health criteria for bromoform:

|                    | Idaho 2006 HH Criteria | Idaho 2015 Calculated HH Criteria | Idaho 2015 Draft HH Criteria |
|--------------------|------------------------|-----------------------------------|------------------------------|
| Water and Organism | 4.3 µg/L               | 7.1 µg/L                          | 4.3 µg/L                     |
| Organism Only      | 140 µg/L               | 156 µg/L                          | 140 µg/L                     |

Because the calculated criteria exceed the 2006 criteria, the 2006 criteria are retained.

References

National Toxicology Program (NTP). 1989. Toxicology and Carcinogenesis Studies of Tribromomethane (Bromoform) (CAS No. 75-25-2) in F344/N Rats and B6C3F1 Mice (Gavage Studies). NTP Technical Report Series no. 350. U.S. Department of Health and Human Services, U.S. Public Health Service, National Institutes of Health, National Toxicology Program, Research Triangle Park, NC. Accessed March 2015. [https://ntp.niehs.nih.gov/ntp/htdocs/lt\\_rpts/tr350.pdf](https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr350.pdf).

- U.S. EPA. 2005. Drinking Water Criteria Document for Brominated Trihalomethanes. EPA-822-R-05-011. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Washington, DC. Accessed February 2015. [http://water.epa.gov/action/advisories/drinking/upload/2006\\_05\\_04\\_criteria\\_drinking\\_brthm-200605-508.pdf](http://water.epa.gov/action/advisories/drinking/upload/2006_05_04_criteria_drinking_brthm-200605-508.pdf).
- U.S. EPA. 2014. Draft: updated national recommended water quality criteria - human health. US Environmental Protection Agency, Washington, DC. Available from: <http://water.epa.gov/scitech/swguidance/standards/criteria/current/hhdraft.cfm>.
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