Fact Sheet Date: March 12, 1998

NEW YORK STATE
- HUMAN HEALTH FACT SHEET -

Ambient Water Quality Value for Protection of Sources of Potable Water

SUBSTANCE: Bromochloromethane **CAS REGISTRY NUMBER:** 74-97-5

AMBIENT WATER QUALITY VALUE: 5 ug/L

BASIS:

	Surface Water:	Principal Organic Contaminant Classes
	Groundwater:	Former Reference to 10 NYCRR Subpart 5-1 Principal Organic Contaminant (POC) General Maximum Contaminant Level (MCL)

SUMMARY OF INFORMATION

A search of relevant databases revealed some information on bromochloromethane.

An oral RfD of 0.013 mg/kg/d was determined by EPA's Office of Drinking Water on the basis of an inhalation study in male rats exposed to 0, 500 or 1000 ppm and female rats exposed to 370 ppm 5 days/week for 195 days. The rats exhibited increased liver-to-body weight ratios (Torkelson et al., 1960). A Lifetime Health Advisory of 90 ug/L bromochloromethane was calculated.

Bromochloromethane is classified in Class D with respect to human carcinogenicity because of lack of data. Some positive genotoxicity data exists (IRIS, 1993).

Bromochloromethane is in a principal organic contaminant class (class 1) as defined in 6 NYCRR 700.1.

DERIVATION OF VALUE

Surface Water

Regulations [6 NYCRR 702.2(b)] require that the value be the most stringent of the values derived using the procedures found in sections 702.3 through 702.7. The principal organic contaminant class value of 5 ug/L (702.3(b)) represents the most stringent value that can be derived for bromochloromethane. Therefore, the ambient surface water quality value for bromochloromethane is 5 ug/L.

Groundwater

The principal organic contaminant (POC) groundwater standard of 5 ug/L (6 NYCRR 703.5) applies to bromochloromethane. This standard became effective on January 9, 1989 by inclusion by reference to 10 NYCRR Subpart 5-1 standards. The basis and derivation of the POC standard are described in a separate fact sheet.

REFERENCES

NYSDEC. 1991. 6 NYCRR, Chapter X, Parts 700-705. Water Quality Regulations for Surface Waters and Groundwaters.

Torkelson, T.R., F. Oyen and V.K. Rowe. 1960. The toxicity of bromochloromethane (methylene chlorobromate) as determined on laboratory animals. Am. Ind. Hyg. Assoc. 71:275-286.

USEPA. 1993. IRIS. Bromochloromethane.

USEPA. 1990. Health and Environmental Effects Document for Bromochloromethane. Environmental Criteria and Assessment Office, Cincinnati, OH.

USEPA. 1989. Bromochloromethane. Health Advisory. Office of Water. U.S. Environmental Protection Agency, Washington, D.C.

SEARCH STRATEGY

IRIS
RTECS
CCRIS
Database Searches Toxline, NTIS 12/92

New York State Department of Environmental Conservation
Division of Water
AS
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