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: 1,1,2-Trichloropropane **CAS REGISTRY NUMBER:** 598-77-6

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 little information on 1,1,2-trichloropropane (TCP).

A single 90-day toxicity study was performed on male and female weanling Sprague-Dawley rats administered 1,1,2-TCP. Weanling rats given 0.15, 1.5, 15 or 150 mg/kg/day 1,1,2-TCP in drinking water (males) demonstrated increased liver weight at the highest dose. Female weanling rats given 0.20, 2.0, 20.3 or 203 mg/kg/day for 90 days demonstrated increased serum cholesterol levels at the highest dose. The NOAEL was determined to be 15 mg/kg/day in males (Villeneuve et al., 1985). An RfD of 5 ug/kg/day was calculated by IRIS (USEPA, 1993) on the basis of this data. A Health and Environmental Effects Document on 1,1,2-TCP exists (USEPA, 1987).

No data exists on the carcinogenicity, teratogenicity or reproductive toxicity potential of 1,1,2-TCP.

1,1,2-Trichloropropane is in a principal organic contaminant class (class 1, halogenated alkanes) as defined in 6NYCRR 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 1,1,2-trichloropropane. Therefore, the ambient surface water quality value for 1,1,2-trichloropropane is 5 ug/L.

Groundwater

The principal organic contaminant (POC) groundwater standard of 5 ug/L (6 NYCRR 703.5) applies to 1,1,2-trichloropropane. 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 10, Parts 700-705. Water Quality Regulations for Surface Waters and Groundwaters. Albany, N.Y.

Villeneuve, D.C.; Chu, I; Secours, V.E.; Cotie, M.G.; Plaa, G.L.; Valli, V.E. 1985. Results of a 90-day toxicity study on 1,2,3- and 1,1,2-trichloropropane administered via the drinking water (abstract). Sci. Total Environ. 47:421-6.

U.S. EPA. 1993. IRIS.

U.S. EPA. 1987. Health and Environmental Effects. Document on Trichloropropanes. Office of Health Environmental Assessment ECAO. Cincinnati, OH.

SEARCH STRATEGY

RTECS
IRIS
Databases searched: TOXLINE, BIOSIS, NTIS 1965 to February 1993.

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Division of Water
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