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: alpha,2,6-Trichlorotoluene **CAS REGISTRY NUMBER**: 2014-83-7

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 alpha-2,6-trichlorotoluene. The substance does not appear on IRIS. There is insufficient information with which to determine its carcinogenicity.

In a 28-day study, groups of 10 male and 10 female rats were fed alpha,2,6-trichlorotoluene (TCT) in their diet at 0, 0.5, 5.0, 50 or 500 ppm for 28 days. Growth rate and food consumption were not affected by treatment. No deaths occurred. Hepatic microsomal aminopyrine N-demethylase activities were increased in male rats fed 500 ppm alpha,2,6-TCT. Hematological parameters were not affected by treatment. Mild histological changes were seen in the liver, kidney and thyroid of treated rats. Data suggested that alpha,2,6-TCT possessed a low order of oral toxicity in the rat (Chu et al., 1984). Although the data suggest a NOEL of 50 ppm, the NOEL is of uncertain validity because the study is limited by scant results and inadequate reporting.

alpha,2,6-Trichlorotoluene is in a principal organic contaminant class (class 3, halobenzenes and substituted benzenes) 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 alpha,2,6-trichlorotoluene. Therefore, the ambient surface water quality value for alpha,2,6-trichlorotoluene is 5 ug/L.

Groundwater

The principal organic contaminant (POC) groundwater standard of 5 ug/L (6 NYCRR 703.5) applies to alpha,2,6-trichlorotoluene. 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.

Chu, I., Shen, SY, Villeneuve, DC, Secours, VE, Valli, VE. 1984. Toxicity of Trichlorotoluene isomers: A 28-day feeding study. J. Environ. Sci. Health (B) 19(2): 183-91.

SEARCH STRATEGY

IRIS
RTECS
CCRIS
Database searches on NTIS and Toxline May 1993

New York State Department of Environmental Conservation Division of Water AS February 9, 1994