

FACT SHEET DATE: SEP 6 1990

NEW YORK STATE
- HUMAN HEALTH FACT SHEET -

**Ambient Water Quality Value for
Protection of Sources of Potable Water**

SUBSTANCE: Hexazinone

CAS REGISTRY NUMBER: 51235-04-2

AMBIENT WATER QUALITY VALUE: 50 ug/L

BASIS: Reference to 10 NYCRR Subpart 5-1 General Standards

SUMMARY OF INFORMATION:

The Lifetime Health Advisory from the USEPA's Office of Drinking Water for nononcogenic effects from hexazinone is 200 ug/L (USEPA, 1988). This is calculated from a Reference Dose (RfD) of 0.03 mg/kg/day, assuming a body weight of 70 kg, a water consumption rate of 2 L per day and that 20% of the intake of this substance is from drinking water. Regarding its carcinogenic potential, hexazinone may be classified in USEPA Group D: not classified (a category used for substances with inadequate or no animal evidence of carcinogenicity).

Hexazinone is an unspecified organic contaminant (UOC) as defined under New York State Department of Health (DOH) regulations (10 NYCRR Subpart 5-1). The DOH's maximum contaminant level (MCL) for UOCs is 50 ug/L, which became effective January 9, 1989.

DERIVATION OF VALUE:

Groundwater

Current DEC regulations for groundwater (Part 703) automatically and immediately include, by reference, 10 NYCRR Subpart 5-1 MCLs as DEC standards. Given that hexazinone is a UOC as described above and that DEC does not have a more stringent specific groundwater standard for it, the DEC ambient groundwater quality standard for this substance is 50 ug/L.

Although the DEC is proposing to delete the UOC MCL as a general standard for groundwater, it is being retained as a specific standard for certain pesticides or pesticide degradation products, including hexazinone, that have been found in or have the potential to leach into groundwater in New York State.

Surface Water

Current DEC regulations for surface water (Part 701) reference 10 NYCRR Part 5 as a procedure for deriving standards and guidance values. Given that hexazinone is a UOC as described above and that a value more stringent than 50 ug/L is not indicated by the available information, the surface water value for this substance should be 50 ug/L, based on the Part 5 UOC MCL.

Although the Part 5 UOC MCL is proposed for deletion as a procedure for surface water, the value of 50 ug/L would also be derived for hexazinone under the proposed DEC regulations (702.15(g)(1)(ii)). Under this subparagraph, a value greater than 50 ug/L cannot be derived for a substance unless both the oncogenic and nononcogenic effects have been adequately evaluated. Because the oncogenic potential of hexazinone has not been adequately assessed, the value of 50 ug/L would also be derived for it under the proposed DEC regulations.

REFERENCES:

U.S. Environmental Protection Agency (USEPA). 1988. Hexazinone Health Advisory. Office of Drinking Water, U.S. Environmental Protection Agency, August, 1988.

CSS/SS