Date: October 10,1984

Surface Water Quality Standard Documentation

Chemical: Isodecyl diphenyl phosphate

C.A.S, No.(s): 29761-21-5

Basis (Human/Aquatic): Aquatic

Standard by Water Classification:

	$\frac{ug/1}{}$	Notes
Classes AA,AA-s;A;A-s;B;C	1.73	I
Class D	22	K

Classes SA; SB; SC; I

Class SD

Remarks:

Summary of Information

- Adams, W.J. 1981. Sanitizer 148 safety assessment. Monsanto Corp. Report. Submitted to DEC in support of a SPDES application.

 - -rainbow trout 96hr LC₅₀ = 7.6 mg/l -Daphnia 48hr LC₅₀ = 0.22 mg/l -a geometric mean of the effect and no effect concentrations from a fathead minnow 30-day embryo-larval test was 78 ug/l.
 - -the geometric mean of the effect and no affect level of a Daphnia chronic test was 1.73 ug/1.
 - -fathead minnow bioconcentration factor ranged from 440-866.
- Saeger et al. 1979. Environmental fate of selected phosphate esters. Environmental Science and Technoclogy 13(7): 840-844.
 - -IDDP partition coefficient = 273,000: triphenyl phosphate partition coefficient = 42,500
 - -IDDP biodegradation at 3-13 ppm was 54-84% complete after 24-28 days, respectively.
 - -after a 48 day biodegradation test with IDDP at 19 parts per million 68.4% of the theoretical CO, was produced.

Summary of Information

The Daphnia chronic value of 1.73 ug/l should be adopted as the standard for all freshwater classes except D. applying a factor of 0.1 to the Daphnia acute value of 0.22 mg/l results in a value of 22 mg/l which should be adopted as the standard for class D.