

## TIER II ACUTE AND CHRONIC AQUATIC LIFE VALUES FOR METHYLAMINE

### Standard:

The procedures described in the Tier II methodology indicate that, except possibly where a locally important species is very sensitive, aquatic organisms should not be affected unacceptably if the four (4) day average concentration of methylamine does not exceed 860 µg/L more than once every three (3) years on the average and if the one (1) hour average concentration does not exceed 7,700 µg/L more than once every three (3) years on the average.

### Calculations:

#### Acute Aquatic Life:

$$\text{SAV} = \text{lowest GMAV}/\text{SAF}$$

$$\text{Lowest GMAV} = 338,269 \text{ } \mu\text{g/L}$$

$$\text{SAF} = 21.9$$

$$\text{SAV} = 338,269/21.9 = 15,446 \text{ } \mu\text{g/L}$$

$$\text{SMC} = \text{SAV}/2 = 15,446/2 = \mathbf{7,700 \text{ } \mu\text{g/L}}$$

#### Chronic Aquatic Life:

$$\text{SCV} = \text{SAV}/\text{SACR}$$

$$\text{SACR} = 18$$

$$\text{SCV} = 15,446/18 = \mathbf{860 \text{ } \mu\text{g/L}}$$

### Notes:

NONE

Table 1. GMAVs and SMAVs for methylamine

<u>Genus Mean Acute Value (µg/L)</u>	<u>Species</u>	<u>Species Mean Acute Value (µg/L)</u>	<u>Acute- Chronic Ratio</u>	<u>Reference Number</u>
338,269	Cladoceran <u>Daphnia magna</u>	163,000		1
	Cladoceran <u>Daphnia magna</u>	702,000		1

References:

1. Kuhn,R., M.Pattard, K.Pernak, and A.Winter 1989. Results of the Harmful Effects of Selected Water Pollutants (Anilines, Phenols, Aliphatic Compounds) to Daphnia magna Water Res. 23(4):495-499

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