

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: N-Nitrosodimethylamine file (CAS # 62-75-9)
FROM: Gary Butterfield
SUBJECT: Screening level for N-Nitrosodimethylamine
DATE: March 15, 2006

The EPA 1986 IRIS cancer inhalation slope factor for n-nitrosodimethylamine of $1.4e-2$ $(\text{ug}/\text{m}^3)^{-1}$ was used to establish the IRSL and SRSL of 0.00007 and 0.0007 ug/m^3 . The inhalation slope factor was converted by EPA from the oral slope factor of 51 $(\text{mg}/\text{kg})^{-1}$. This slope factor is based on the increased liver tumors in female Colworth rats following exposure by drinking water, as reported by Peto et al (1984). See the IRIS documentation for additional details.

EPA. 2006. IRIS documents are available at www.epa.gov/IRIS

N-Nitrosodimethylamine CAS# 62-75-9

EPA (2006; IRIS) unit risk estimate = $1.4E-2 \text{ (ug/m}^3\text{)}^{-1}$

Screening level calculations:

$$\text{IRSL} = \frac{1E-6}{1.4E-2 \text{ (ug/m}^3\text{)}^{-1}} = 7E-5 \text{ ug/m}^3 \text{ (annual AT)}$$

$$\text{SRSL} = \frac{1E-5}{1.4E-2 \text{ (ug/m}^3\text{)}^{-1}} = 7E-4 \text{ ug/m}^3 \text{ (annual AT)}$$