

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: File for Heptachlor (CAS # 76-44-8)  
FROM: Robert Sills, AQD Toxics Unit Supervisor  
SUBJECT: Screening levels for Heptachlor  
DATE: September 10, 2015

The cancer risk-based screening levels for heptachlor were established on 11/30/94. They are as follows:

IRSL = 0.0008  $\mu\text{g}/\text{m}^3$ , annual averaging time;

SRSL = 0.008  $\mu\text{g}/\text{m}^3$ , annual averaging time.

EPA (1993) concluded that heptachlor is classified as, "B2; probable human carcinogen" based on inadequate human data and sufficient evidence of carcinogenicity in animals, namely an increased incidence of benign and malignant liver tumors after oral (dietary) administration of heptachlor in mice. EPA (1993) provided an inhalation unit risk estimate of 1.3E-3 per  $\mu\text{g}/\text{m}^3$ , calculated from the oral bioassat data. Based on this unit risk estimate (URE), the IRSL and SRSL are derived as follows:

$$\text{IRSL} = \frac{1\text{E-}6}{1.3\text{E-}3 (\mu\text{g}/\text{m}^3)^{-1}} = 0.0008 \mu\text{g}/\text{m}^3 \text{ (annual AT)}$$

$$\text{SRSL} = \frac{1\text{E-}5}{1.3\text{E-}3 (\mu\text{g}/\text{m}^3)^{-1}} = 0.008 \mu\text{g}/\text{m}^3 \text{ (annual AT)}$$

References

EPA. 1993. IRIS database. Chemical entry for heptachlor. Carcinogenicity assessment; last revised 7/1/93. Still current as of 9/10/15.