

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

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INTEROFFICE COMMUNICATION

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September 1, 1999

To: p,p'-DDD file (CAS # 72-54-8)  
From: Gary Butterfield  
Subject: Screening level for p,p'-DDD

The screening level for p,p'-DDD is based on the EPA IRIS value of the oral slope factor of 2.4E-1 per (mg/kg). Based on increased incidence of mouse liver tumors following dietary exposure to 250 ppm DDD as reported by Tomatis et al 1974.

The oral slope factor was converted by this reviewer to an inhalation slope factor of 7E-5 per ( $\mu\text{g}/\text{m}^3$ ), resulting in a IRSL of 0.01  $\mu\text{g}/\text{m}^3$  and SRSL of 0.1  $\mu\text{g}/\text{m}^3$ .

The combined impact of DDT, DDE and DDD should be considered if all are present. DDE and DDD are metabolites of DDT. All three of these compounds cause the same type of tumors in the same organ, liver. In addition, all three compounds also have similar slope factors. Therefore, the combined amounts of these three chemicals should be below the screening level of IRSL = 0.01  $\mu\text{g}/\text{m}^3$  and SRSL = 0.1  $\mu\text{g}/\text{m}^3$ .

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