MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

To: **File for Methyl Isoamyl Ketone (CAS# 110-12-3)**

From: George Eurich

Date: 6-6-2011

Subject: **Screening level for Methyl Isoamyl Ketone (CAS# 110-12-3)**

The screening level for Methyl Isoamyl Ketone is 2300 ug/m3 based on 8 hour averaging.

The following references or databases were searched to identify data to determine the screening level: U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS), National Institute for Occupational Safety and Health (NIOSH) Registry for Toxic Effects of Chemical Substances (RTECS), American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), Michigan Department of Natural Resources and Environment (DNRE) library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) online, National Library of Medicine (NLM) - Toxline, and National Toxicology Program (NTP) Status Report.

The AQD established an *Interim* Initial Threshold Screening Level of 2340 ug/m3 for Methyl Isoamyl Ketone in 1993. A subsequent literature review, as noted above, was performed in 2011, and determined that there are no EPA RfD or RfC values for methyl isoamyl ketone, nor are there published toxicity data sufficient to derive a RfC. Occupational safety levels were noted by both NIOSH (REL) and ACGIH (TLV) of 50 ppm (234 mg/m3). Rationale noted in the NIOSH guideline is protection against liver, kidney, and CNS effects. The ACGIH TLV is based on analogy to the effects of exposure to methyl isobutyl ketone.

ITSL = OEL divided by 100
= (234 mg/m3)/100
= (2.30mg/m3) (1000 ug/mg) – 2 significant figures

ITSL = 2300 ug/m3 based on 8 hr avg