MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

August 4, 2006

TO: File for 3,5-Lutidine (591-22-0)

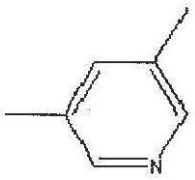
FROM: Michael Depa, Toxics Unit, Air Quality Division

SUBJECT: Development of the Screening Level

The initial threshold screening level (ITSL) for 3,5-lutidine is 0.1µg/m³ (annual averaging time).

The following references or databases were searched to identify data to determine the screening level: Environmental Protection Agency's (EPA's) Integrated Risk Information System (IRIS), the Registry of Toxic Effects of Chemical Substances (RTECS), the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), National Institute of Occupational Safety and Health (NIOSH) Pocket Guide to Hazardous Chemicals, Environmental Protection Bureau Library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) Online (1967- March 2006), National Library of Medicine (NLM), Health Effects Assessment Summary Tables (HEAST), and National Toxicology Program (NTP) Status Report. The EPA has not established a reference concentration (RfC) or reference dose (RfD) for 3,5-lutidine. The ACGIH and NIOSH have not established Occupational Exposure Limits (OELs). The molecular weight is 107.15 g, and the molecular formula is C_7H_9N. The molecular structure is pictured in Figure 1. The melting point is -6.6°C, and the boiling point is 172.7 °C. 3,5-lutidine has a vapor pressure of 1.75 mmHg at 25°C. It is water soluble, and its physical state is a hygroscopic solid.

Figure 1. Molecular Structure of 3,5-Lutidine



After performing the standard literature searches no toxicity information was found. Therefore, the ITSL for 3,5-lutidine was established at 0.1 µg/m³ (annual averaging time) based on Rule 232(i).