MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

March 9, 2009

TO: File for Benzyl Chloride (CAS No. 100-44-7)

FROM: Michael Depa, Toxics Unit, Air Quality Division

SUBJECT: Development of the Screening Level

The U.S. EPA Integrated Risk Information System (IRIS) provides an oral potency value for benzyl chloride of 1.7E-1 per mg/kg/day. It was last revised 08/01/1994. As per Rule 231(3)f, this potency was converted to an inhalation unit risk via the following equation:

q_1* (inhalation) = q_1* (oral) x 20m³/70kg x 1mg/1000µg

q_1* (inhalation) = 1.7E-1(mg/kg/day)$^{-1}$ x 20m³/70kg x 1mg/1000µg

q_1* (inhalation) = 4.86E-5(µg/m³)$^{-1}$

The initial risk screening level (IRSL) for benzyl chloride is calculated according to Rule 231(1):

IRSL = (1E-6)/unit risk

IRSL = (1E-6)/4.86E-5(µg/m³)$^{-1}$

IRSL = 0.0205 µg/m³

IRSL = 0.02 µg/m³