MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 21, 1994

TO: File for Bisnoralcohol (60966-36-1)

FROM: Marco Bianchi

SUBJECT: Initial Threshold Screening Level

The initial threshold screening level (ITSL) for bisnoralcohol is 17 $\mu g/m^3$ based on an annual averaging time.

The following references or databases were searched to identify data to determine the ITSL: IRIS, HEAST, NTP Management Status Report, RTECS, EPB-CCD, EPB library, CAS-online, NLM-online, IARC, NIOSH Pocket Guide, and ACGIH Guide.

A complete reference check was conducted for bisnoralcohol, but only limited information was available. Upjohn provided an in-house oral LD_{50} study for bisnoralcohol. Four male albino rats were given a single oral dose of 5000 mg/kg body weight of bisnoralcohol suspended in a 0.25% methylcellulose solution. No compound related effects were observed immediately or for 14 days post dosing. The rats were sacrificed at the termination of the study and no gross lesions were observed at necropsy. Although there were no deaths from compound administration at 5000 mg/kg, this value will be used as a surrogate to calculate an ITSL.

The ITSL was derived as follows:

The LD_{50} for this study was determined to be 5000 mg/kg.

The ITSL was derived as follows:

LD_{50} = 5000 mg/kg

$$\text{ITSL} = \frac{1}{500} \times \frac{1}{40} \times \frac{1}{100} \times \frac{5000}{0.167 \times 0.900} = 0.0166 \text{ mg/kg}$$

0.0166 mg/kg x 1000 = 17 $\mu g/m^3$ based on annual averaging.

The ITSL for bisnoralcohol = 17 $\mu g/m^3$ based on annual averaging.

MB:ma