MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

November 10, 1998

TO:

File for ethyl chloroacetate (CAS #105-39-5)

FROM:

Cathy Simon, Supervisor, Toxics Unit, Air Quality Division

SUBJECT:

Change in the Initial Threshold Screening Level (ITSL)

The ITSL for ethyl chloroacetate has been changed from 0.04 ug/m³ to 0.1 ug/m³ based on an annual averaging time.

The change in the ITSL was made due to a revision in the State's air toxic rules which became effective on November 10, 1998. Previously, the ITSL had been set pursuant to Rule 232(i). This rule sets the ITSL at a default value of 0.04 ug/m³ (annual average) when no specific data are available to determine an ITSL. The November 10, 1998 revisions to the rules changed this default ITSL to a value of 0.1 ug/m³.

No updated review of the literature has been done since the ITSL was originally set at a value of 0.04 ug/m³, to determine if new data are available for this compound.

CAS:SLB

RECOMMENDATIONS OF THE SCIENTIFIC ADVISORY PANEL

ETHYLCHLOROACETATE

CAS # 105-39-5 AUGUST 15, 1994

Background:

The ITSL for ethylcyanoacetate was set by the Air Quality Division (AQD) at $0.04~\mu \rm g/m^3$ based on annual average time. A thorough search of the literature was conducted in March, 1993 by staff of the AQD. The screening level was set at default due to the lack of available data appropriate for setting a screening level.

Public Comment:

Dow Chemical commented that a mouse LD50 of 300 mg/kg was available from which a screening level could be derived. Dow predicted an ITSL of 0.7 μ g/m³ (annual averaging time) based on this LD50.

Panel Recommendations:

A new literature search was conducted by AQD in response to the public comment, but no new data appeared. Dow was contacted and asked to supply references and/or documentation from which a different screening level could be derived. They provided a MSDS from their ethylchloroacetate supplier (Oxychem) which noted the mouse oral LD50. Oxychem was contacted in order to reference the LD50. Oxychem could not give a specific reference, only that toxicology data were taken from database searches (RTECS, HSDB, etc.). The Oxychem reference was checked and it was recommended by AQD staff that the information provided in the MSDS wasn't adequate for changing the screening level due to unavailability of the cited study.

The Panel recommends that the screening level remain at 0.04 $\mu g/m^3$ based on annual averaging.