

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

November 10, 1998

TO: File for ethyl cyanoacetate (CAS #105-56-6)
FROM: Cathy Simon, Supervisor, Toxics Unit, Air Quality Division
SUBJECT: Change in the Initial Threshold Screening Level (ITSL)

The ITSL for ethyl cyanoacetate 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

ETHYLCYANOACETATE

CAS # 105-56-6

AUGUST 15, 1994

Background:

The ITSL for ethylcyanoacetate was set by the Air Quality Division (AQD) at $0.04 \mu\text{g}/\text{m}^3$ based on annual averaging 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 500 mg/kg was available but neither a reference nor a route of administration was given.

Panel Recommendations:

A new literature search was performed 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. Dow provided a database search (RTECS, etc.) and noted a mouse - intraperitoneal (i.p.) LD50 of 500 mg/kg from which they predicted an ITSL of $1.1 \mu\text{g}/\text{m}^3$ - annual averaging time. No other details of the study were available from the search. It was recommended by AQD staff that an intraperitoneal study was not adequate for changing the screening level.

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