

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

October 9, 2001

TO: Quinoline File (CAS # 91-22-5)
FROM: Gary Butterfield, Toxics Unit, Air Quality Division
SUBJECT: Screening Levels for Quinoline

On September 27, 2001, the U.S. Environmental Protection Agency (EPA) posted a new cancer oral potency factor for Quinoline in the EPA IRIS's database. The new oral potency of 3 (mg/kg)^{-1} is smaller than the former 1986 EPA potency of 12 (mg/kg)^{-1} . The new potency factor is still based of the same study (Hirao et al 1976), but uses newer methods to reduce uncertainty as outlined in the 1996 cancer guidelines. The new EPA oral potency was converted to the inhalation potency of $0.00086 \text{ (ug/m}^3\text{)}^{-1}$ using Air Quality Division (AQD) standard methods and assumptions in order to calculate new IRSL and SRSL values of 0.001 and 0.01 ug/m^3 . For further details of the methods used to calculate the new oral potency factor, see EPA's IRIS printout and the related September 2001 Toxicological Review of Quinoline (EPA/635/R-01/005).

GB:DB

cc: Cathy Simon, AQD
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