MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

INTEROFFICE COMMUNICATION

TO:

Hydrogen cyanide File (CAS # 74-90-8)

FROM:

Gary Butterfield

SUBJECT:

Screening level for Hydrogen cyanide

DATE:

September 30, 2010

EPA revised the RfC for hydrogen cyanide and cyanide salts to 0.8 ug/m3 on Sept 28, 2010. The key study was El Ghawabi et al (1975) - an occupational epidemiology study. Note that this was the same key study for the former RfC of 3 ug/m3. EPA used a total UF of 1000 for the old RfC but used an UF of 3000 for the new RfC – by increasing the data base UF from 3 to 10. An averaging time of annual was used with RfC because a seconardy short term ITSL (50 ug/m3) from the OEL (NIOSH REL and ACGIH TLV) for hydrogen cyanide is being used with an one hour average time.

See the RfC documentation and the TLV documentation for additional details.