

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

September 6, 2000

TO: File for Ethylenediamine Tetra-acetic Acid, Tetrasodium Salt (CAS# 64-02-8)

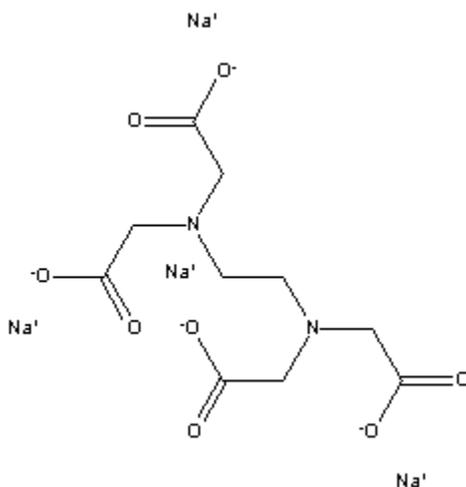
FROM: Michael Depa, Toxics Unit, Air Quality Division

SUBJECT: Screening Level Determination

The initial threshold screening level (ITSL) for ethylenediamine tetra-acetic acid, tetrasodium salt is 0.1 $\mu\text{g}/\text{m}^3$ based on an annual averaging time.

The following references or databases were searched to identify data to determine the screening level: U.S. EPA Integrated Risk Information System (IRIS), Registry for Toxic Effects of Chemical Substances (RTECS), American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), National Institute for Occupational Safety and Health (NIOSH) Pocket Guide to Hazardous Chemicals, Environmental Protection Bureau Library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) Online (1967- April, 2000), National Library of Medicine (NLM), Health Effects Assessment Summary Tables (HEAST), and National Toxicology Program (NTP) Status Report. The EPA has not established a reference dose (RfD) or a reference concentration (RfC) ethylenediamine tetra-acetic acid, tetrasodium. There are no occupational exposure limits (e.g., ACGIH TLV or NIOSH REL). The molecular weight of ethylenediamine tetra-acetic acid, tetrasodium is 380.2g. The molecular formula is $\text{C}_{10}\text{H}_{12}\text{N}_2\text{Na}_4\text{O}_8$. The molecular structure for ethylenediamine tetra-acetic acid, tetrasodium is shown in figure 1. It is expected to be a solid at standard temperature and pressure.

Figure 1.



Since there was no adequate toxicological data with which to derive a screening level, Rule 232(1)j was used to establish the screening level of 0.1 $\mu\text{g}/\text{m}^3$ with an annual averaging time.

MD:LH