4. PRODUCTION, IMPORT, USE, AND DISPOSAL

4.1 PRODUCTION

Methyl mercaptan is produced commercially by the reaction of hydrogen sulfide with methanol (Santodonato et al. 1985; Windholz 1983). Methyl mercaptan is manufactured by the Organic Chemical Division of Pennwalt Corporation in Beaumont and Houston, Texas. Production volumes for these facilities were not located (SRI 1987, 1988, 1989).

4.2IMPORT/EXPORT

No data were located regarding the import or export of methyl mercaptan.

4.3 USE

Methyl mercaptan is used as a chemical intermediate in the production of jet fuel, certain pesticides, and plastics and in the synthesis of the amino acid methionine (ACGIH 1986; HSDB 1989; Santodonato et al. 1985). Methyl mercaptan is also used to add odor to certain odorless hazardous gases. Methyl mercaptan is not one of the chemicals considered acceptable for use as an odorant in natural gas (AGA 1983; HSDB 1989; Reid 1958; Santodonato et al. 1985; Windholz 1983).

4.4 DISPOSAL

Since methyl mercaptan is listed as a hazardous substance, disposal of wastes containing methyl mercaptan is controlled by a number of federal regulations (see Chapter 7). Land disposal restrictions for methyl mercaptan are among those scheduled for promulgation in 1990 (40 CPR 268.12). Methyl mercaptan may be disposed of by controlled incineration, and it is a potential candidate for fluidized bed and rotary.kiln incineration (HSDB 1989). No quantitative data were located on the amount of methyl mercaptan disposed of in waste sites.