Yale University Chemical Hygiene Plan Section 3.5 - CHEMICALS OF HIGH ACUTE & CHRONIC TOXICITY

Special Handling Procedures

- 1. Avoid or minimize contact with these chemicals by any route of exposure. Protect yourself by wearing gloves, closed toe shoes and long sleeved laboratory coat. Protect your eyes by safety goggles or glasses. If procedure involving use of these chemicals has a high potential for a splash consider putting on an impermeable apron or coveralls, and possibily a face shield in addition to goggles.
- 2. Use these chemicals in a chemical fume hood or other appropriate containment device if the material is volatile or the procedure may generate aerosols. If a chemical fume hood is used it should be evaluated to confirm that it is performing adequately (a face velocity of at least 100 linear feet per minute $(\pm 20\%)$) with the sash at the operating height.
- 3. Store volatile chemicals of high acute or chronic toxicity in the cabinet under the hood or other vented area. Volatile chemicals should be stored in unbreakable primary or secondary containers or placed in chemically resistant trays (to contain spills). Nonvolatile chemicals should be stored in cabinets or in drawers. Do not store these chemicals on openshelves or counters.
- 4. Decontaminate working surfaces with wet paper towels after completing procedures. Place the towels in plastic bags and secure. Dispose of them in the normal trash.
- 5. Volatile chemicals should be transported between laboratories in durable outer containers.
- 6. Vacuum pumps used in procedures should be protected from contamination with scrubbers or filters.
- 7. If one or more of these substances are used in large quantities, on a regular basis (three or more separate handling sessions per week), or for long periods of time (4-6 hours) a qualitative and potentially quantitative exposure assessment should be performed. Contact the Occupational Health and Safety Section to perform this assessment. Lab personnel of childbearing age should be informed of any known male and female reproductive toxins used in the lab. An employee who is pregnant, or planning to become pregnant, and who is working with potential reproductive toxins that might affect the fetus, should contact the Occupational Health and Safety Section to evaluate their exposure and inform the Employee Health Physician and her personal physician of the particular substance being used as necessary. The Occupational Health and Safety Section can assess potential exposures and work with the principal investigator or laboratory supervisor, if necessary, to adjust work practices to minimize the potential risk.