#### Environmental Health & Safety Department

EOSMS - 204C

Standard Operating Procedure: Methylene Chloride

## 2. Engineering Controls

Because of its high volatility and the possibility of aerosol formation, MC (and MC solutions) must be handled in a chemical fume hood with negative pressure ductwork.

The fume hood should have been inspected in the last 12 months and must function within the acceptable flow rate range. Work should be performed with the sash lowered as much as possible.

### 3. Designated Area

MC must be used in an area that is designated for its use complete with signs indicating that purpose. The area should be wiped down with a soap and water solution after completion of MC use.

#### 4. Personal Protective Equipment -3

Gloves, lab coat and safety glasses must be worn when working with MC. Wear Polyvinyl Alcohol gloves. Avoid the use of nitrile and latex gloves, as will not provide adequate protection for use of this chemical. Change gloves regularly (at least every two hours) and wash your hands when changing.

If splashes may occur, wear goggles and a face shield instead of safety glasses. Safety glasses do not provide adequate protection from splashes.

## 5. Work Practice Controls

Use a less dangerous product than MC if possible, or purchase in dilute solutions.

Always transfer the chemical from one container to another inside of the fume hood. When transferring the chemical from one container to another, only pour the amount that is needed.

Keep all containers of MC closed as much as possible. This is a highly volatile chemical, and open containers will result in inadvertent release of harmful vapors.

Once work is complete, wipe down the work area with a soap and water solution.

#### micathy Contaction Compared Basel Fast 1rd water solution.

MC is incompatible with strong oxidizers, caustic substances, chemically active metals such as aluminum and mag.74 tBT.89 491.3/F4 1m ps

## 1. Accidental Exposure to Methylene Chloride

If MC vapor has been inhaled, move the victim to fresh air immediately.

If it has been spilled on the skin or clothing, wash the affected area with large amounts of soap and water, using a safety shower or eyewash, as appropriate, for a minimum of 15 minutes. During washing, remove contaminated clothing and footwear. Remove goggles last. Those assisting the victim should wear appropriate protective gloves. A disposable laboratory coat, scrubs, or jumpsuit should be available for the exposed individual to wear after using a safety shower.

If exposure to the eyes has occurred, immediately flush affected eye(s) for at least 15 minutes without stopping. Hold upper and lower eyelids open and away from the eyes during irrigation.

# Appendix A: SOP Review Record Form

#### To be completed by the employee/ student

Methylene Chloride (MC) is considered a particularly hazardous substance (PHS) due to its target organ toxicity and suspected carcinogenicity. To manage risks associated with use of MC and to ensure the safety of KSU employees and students, KSU has established a standard o