

Safety Training Walkthrough

MPRF: SAFETY MANUAL

- I. EMERGENCY PROCEDURES / PROTOCOLS []
 - A. *Life-Threatening Emergency Procedures*
 - B. *Non-Life-threatening Accident / Emergency Procedures*
 - C. *Fire / Emergency-Evacuation Alarm Procedures*
- II. PERSONNEL []
 - A. *Access*
 - B. *The “Buddy”*
 - C. *External (Non-UTK) Users of MPRF*
- III. SAFETY EQUIPMENT []
 - A. *First Aid Kit*
 - B. *Fire Extinguishers*
 - C. *Chemical Showers and Eye Wash Stations*
 - 1. *Chemical Spills on your clothes / body*
 - 2. *Chemical Splashes into your eyes*
 - D. *Automatic Fire Sprinkler System*
 - E. *Chemical spill Clean-up / Containment*
 - F. *Calcium Gluconate Gel for HF Exposure Treatments*
- IV. CHEMICAL SAFETY []
 - A. *MSDS sheets*
 - B. *De-Ionized Water*
 - C. *Cyanides*
 - D. *Solvents*
 - E. *Acids*
 - 1. *Special Word about HF (Hydrofluoric Acid)*
 - F. *Bases (Caustics)*
 - G. *Flammable and Combustible Chemicals*
 - H. *Toxic Chemicals*
 - I. *Photoresist and Developers*
 - J. *Cryogenics (Liquid Nitrogen, Liquid Helium, Solid CO₂)*
 - K. *Waste Disposal*
 - L. *Chemical Spills*
 - M. *Unknowns*
 - N. *Compressed Gases*

- V. SAFETY GUIDELINES []
 - A. *Chemistry Reminder Summary*

MPRF: OPERATING PROCEDURES

- I. GENERAL OPERATIONS POLICY []
- II. PROPER ATTIRE []
 - A. *The Need for Gowning*
 - B. *The Gowning Order*
 - C. *Appropriate Street Clothes*
 - D. *Eye Protection*
 - E. *Additional Protective Wear*
- III. PERSONAL BEHAVIOR WITHIN MPRF []
 - A. *Lab Entry and Exit*
 - B. *Inappropriate Behavior*
 - C. *Visitors to MPRF*
 - D. *Specific Behavior Guidelines*
- IV. EQUIPMENT PROCEDURES []
 - A. *Scheduling Equipment*
 - B. *Equipment Etiquette*
 - C. *Equipment Manuals*
 - D. *Introducing New Equipment*
 - E. *Equipment Repair*
- V. CHEMICAL PROCEDURES []
 - A. *Standard Chemical Inventory and Availability*
 - B. *Chemical Etiquette*
 - C. *Chemicals and Process Training*
 - D. *Introducing New Chemicals*

APPENDIX A: EMERGENCY EVACUATION PLAN []

- I. PURPOSE: EMERGENCY EVACUATION PLANS FOR MPRF []
- II. FIRE ALARM EVACUATION – FROM MPRF []
- III. TOXIC GAS ALARM EVACUATION – FROM MPRF []