Placer County Contractors Association & Builders Exchange

PCCA

WEEKLY SAFETY MEETING

Cleanroom Safety

COMPANY NAME | JOB NAME | DATE

Cleanrooms regulate air quality, temperature, and humidity to achieve the ideal manufacturing and experimental environment for high technology applications. Cleanrooms require specific attire, personal protective equipment (PPE), and the use of specialized equipment and chemicals. While modern air handlers manage the particle count, YOU are the best source to control cleanroom safety.

You are required to wear protective head, foot, and body coverings in a cleanroom to reduce particulate contamination. In addition, you must wear the required PPE to protect you from the materials and processes that you use. Eye protection such as safety goggles and glasses protect sight in the case of a chemical splash or uncontrolled reaction. Face masks and shields should be used for vacuum or pressurized processes if there is a danger of shattering or explosion. Use the appropriate gloves for the chemicals you handle in order to protect your skin. If necessary, you may need to wear a respirator to protect against airborne hazards. Remember that respirator use requires special medical qualification, fit testing, and training.

Be familiar with the cleanroom protocols and layout at your facility. Don't use equipment, materials, or processes that you are unfamiliar with; get the proper training first. Locate and understand the proper operation of safety equipment including fire extinguishers, safety showers, eye wash stations, and emergency shut off and bypass switches. Know the facility emergency signals, alarms, and evacuation routes and procedures. Know and follow compressed gas cylinder safety protocols; ensure that you are familiar with hazardous gas monitoring equipment and the associated alarms.

Chemical handling, including acids, bases, solvents, carcinogens, and cryogenics, is common in cleanrooms. Read and understand the material safety data sheets (MSDS) for the chemicals in the cleanroom to provide guidance on use, required PPE, spill procedures and disposal. If you are splashed with a chemical, immediately flush the area with copious quantities of water for 10 to 15 minutes and remove contaminated clothing.

Pay special attention to the use of hydrofluoric acid (HF) because skin or eye contact is extremely dangerous. HF exposures may not cause pain at first, but the fluoride ion continues to burn through your tissue until it causes painful bone destruction. Rinse any suspected skin or eye contact immediately with water, and seek immediate medical attention. Calcium gluconate gel or other treatment methods may be needed, and these should be administered by a qualified medical professional.

Always conduct chemical processes under fume hoods or in designated wet benches, if possible. Practice good housekeeping with chemicals: clearly label containers, minimize quantities, and clean up materials after use. Ensure that chemicals are stored in rated chemical cabinets and are separated by hazard class. Know the spill procedures and the location of spill equipment in the cleanroom. Properly dispose of all chemicals, mixtures, and spill cleanup materials as hazardous waste in designated waste streams.

Keep cleanroom safety state-of-the-art with proper training and attention to procedures.

Meeting Attended By: _____ _____

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Supervisor's Signature : _____ ***Date:*** _____

Special Topics For Your Project

Employee Safety Recommendations

Reviewed MSDS# **Subject**

Notes: