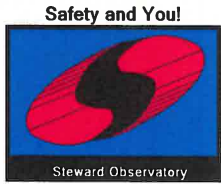


Lead Soldering

Keys to New Policy

- Specifies ventilation method for high temperature and low temperature lead-tin soldering.
 - Weller Charcoal fan for electronics soldering at 400 C.
 - Primarily to remove rosin fumes from employees breathing area.
 - HEPA Filter Fume Extractor for higher temps over 1750 C (BP of Lead).
- Specifies best practices to prevent lead exposure:
 - Use disposable gloves.
 - Wash hands and don't eat in contaminated areas.
 - Employ regular housekeeping to minimize lead contamination in work area.
- Specifies proper waste collection/disposal method through Risk Management.

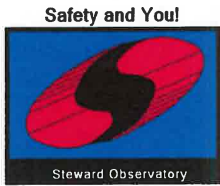


Lead Soldering

Revised Policy Issues I



- Policy states, “Dermal- Lead can be absorbed through the skin.”
 - Is lead absorbed through the skin? **Some forms, but not lead used in solder.**
 - Lead used in soldering is inorganic lead, whose primary exposure pathway is via ingestion.
 - Only organic lead can be absorbed transdermally (i.e tetraethyl and tetramethyl lead was used in leaded gasoline).
 - <https://www.atsdr.cdc.gov/csem/csem.asp?csem=34&po=4>
- **Recommend this sentence be deleted or modified.**



Lead Soldering

Revised Policy Issues II

- **Recommend modifying the following sentences:**
 - Policy states, “Any lead soldering activities that operate at or above the 1750C BP should use a fume extractor (Weller Fume Extracting System).”
 - By definition anything over 450C is considered brazing according to the American Welding Society.
 - A cutting torch may be able to produce these temperatures, so statement is more appropriate for a general lead safety policy
 - Change sentence to “Any activity that involves lead and operates at or above the 1750C BP should use a fume extractor (Weller Fume Extracting System) or other UA Risk Management approved ventilation system.”
 - Policy states, “Inhalation- Lead fumes, which are odorless, are produced during soldering.”
 - Change to, “Inhalation- Lead fumes, which are *odorless*, are not produced during normal soldering operations, but can be produced at temperatures above 1750C.”
 - **Same reason as above.**