



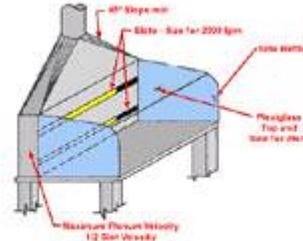
Lead > Secondary Lead Smelter eTool

Maintenance

Maintenance personnel are at risk of exposure to lead fume and dust during maintenance operations involving equipment that is contaminated with lead. There are recommended engineering and work practice controls to minimize employee exposure for the following:

- [Maintaining or moving contaminated equipment](#)
- [Shops](#)

Workbench



Design Criteria

- Q = 250 cfm/linear ft of hood
- Hood length = required working space
- Hood width = 24" maximum
- Duct velocity ≥ 4,500 fpm
- $V_{pl} = 1.75 V_{duct} + 0.25 V_{duct}$

[Click for larger view of workbench diagram](#)

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Maintaining or Moving Contaminated Equipment

Potential Source of Exposure:

- Maintenance shop personnel may be exposed to lead dust when servicing and handling equipment that is contaminated with lead.

Possible Engineering & Work Practice Controls:

- Decontaminate equipment prior to servicing by vacuum, water spray, or mechanical removal such as scraping or brushing in conjunction with local exhaust ventilation.

Shops

Potential Source of Exposure:

- Exposure to lead may occur when working on contaminated equipment in the maintenance shop (**Fig. 1**).

Possible Engineering & Work Practice Controls:

- Provide exhaust ventilated work areas or portable local exhaust ventilation.

- ▶ [Moveable Exhaust Hood Diagram](#)
- ▶ [Work Bench Diagram](#)

- Decontaminate equipment using vacuum, water spray or mechanical removal



Fig. 1. Maintenance shop

such as scraping or brushing in conjunction with local exhaust ventilation.

- Provide low volume/high velocity ventilated hand tools.

▶ [Typical System Low Volume/High Velocity Diagram](#)

▶ [Hood for Cup Type Surface Grinder and Wire Brushes](#)

- Provide supplied air islands at work stations.

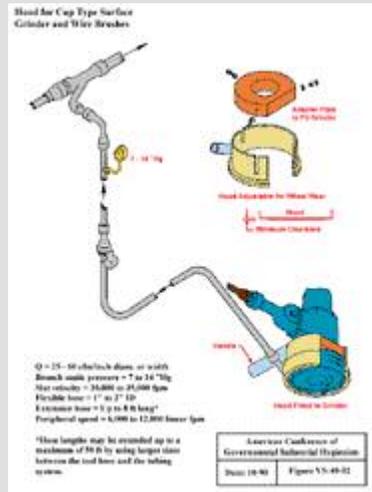
▶ [Supplied Air Island Diagram](#)

- Provide wash-up sink for employees in the shop.

- Keep surfaces as free as practicable of lead contamination.

- Ensure that all shop vacuums are equipped with HEPA filters capable of removing lead.

- Empty vacuums in a manner that minimizes the reentry of lead into the shop.



Click for larger view of surface grinder and wire brush hood diagram

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