WEEKLY SAFETY MEETING

LEAD

Lead is a heavy metal that can cause serious health problems if inhaled or ingested in significant concentrations. Most lead exposure in the mechanical construction industry comes from soldering, servicing ductwork, welding, and flame-torch cutting or grinding on surfaces painted with lead-based paint. Lead is also found in many electrical applications, including lead sheath, high voltage cable, and lead anchors. Work involving the removal or disturbance of any lead based products that would cause employees to be exposed above the PEL levels, requires awareness training, engineering controls, medical monitoring, and air sampling.

Lead Exposure Hazards

Lead-based paint and paint debris are a key hazard when painting, repainting, rehabbing, demolishing, or renovating buildings, tanks, bridges, etc. Lead bricks, mortar and sheets, lead support rods and construction materials, mineral wool insulation with lead contaminants, lead pipes, lead solder and leaded steel roofing materials are potential hazards when involved in renovation, insulation, industrial vacuuming, etc.

A very large dose of lead - for example, children eating large amounts of lead-based paint - can have almost immediate effects. It can cause seizures, coma and, in a matter of days, death. Most of the effects, however, take time to show up. When lead enters the body, it gets into the bloodstream and from there into organs and body tissues. If the body takes in more lead than it can naturally eliminate, the lead builds up and, over time, can cause severe and irreversible damage to the blood-forming, nervous, urinary, and reproductive systems.

The milder short-term effects of overexposure to lead can include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, tremors, numbness, dizziness, hyperactivity, and stomach pain. If you work with or around lead and have any of these symptoms, it's crucial that you report this immediately to your foreman and safety director. That's because chronic overexposure to lead can cause much more serious problems - problems that rarely show symptoms until it's too late to reverse them.

In accordance with OSHA 29 CFR 1910.1025, the PEL (Permissible Exposure Level) is 50 micrograms per cubic meter (50 ug/m3) of air averaged over an 8-hour period. An employee shall not be exposed above the PEL for lead averaged over an 8-hour period. For both construction and general industry, OSHA sets not just a permissible exposure limit, but what it calls an action level for lead. If employees are exposed to 30 micrograms of lead in the air over an eight-hour day, without wearing a respirator, employers must meet various OSHA regulatory requirements. These include:

- Monitoring the air around affected employees to determine lead levels.
- Giving blood tests to affected employees to determine blood lead levels.
- Providing a thorough medical exam before assigning an employee to a lead-containing area.
- Initiating efforts to reduce employee exposure.

If exposure is at or above the action level 30 or more days per year, an affected employee's blood must be tested for lead at least every six months

How to Protect Against Overexposure to Lead

- When drilling holes or demoing find out what you are getting yourself into. Ask questions.
- Wear gloves and wash hands when working with lead cable, lead anchors, or sheathing.
- If you're working with or near a painted surface that will be disturbed, ask your supervisor if the paint contains lead.
- If you MUST work with a lead hazard, or the possibility of one, using a wet method is the preferred choice to keep down any dust.
- Before you use a torch for cutting, safely remove or treat lead paint. Heating lead paint will produce lead fumes.
- Use long-handled torches to keep your distance.
- Use local-exhaust ventilation.
- Depending on exposure levels, respiratory protection may be required.
- When respiratory protection is required, be sure that you have the required training and proper respirator before starting work.
- **NEVER** smoke, eat or drink in work areas that contain lead products.
- **ALWAYS** wash your hands and face to remove any lead dust before smoking, eating, drinking or going to the bathroom.

For demo work or drilling holes, PreTox 2000FD is a single component, temporary overcoating product applied to a lead-based paint coated surface as part of surface preparation/lead abatement operations. PreTox 2000FD renders lead-based paint non-hazardous for the environment and disposal. Designed with fast dry times and limited adhesion, PreTox 2000FD is easy to use on the job. PreTox 2000FD can be applied by brush, roller or mechanical spray equipment. Since PreTox renders lead-based paint non-hazardous, you can drill right through the prepared surface. Remember to wear safety goggles, faceshield and respirator when drilling overhead to prevent breathing in any lead or silica dust from concrete.

Meeting Date: _____ Trainer: _____

Supervisor: _____ Location: _____

Attendees: (Please print clearly)

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

WINGER companies

WEEKLY SAFETY MEETING

LEAD AWARENESS QUIZ

1. Lead is a heavy metal that can cause serious health problems if inhaled/ingested in significant concentrations. True or False? _____

2. Most lead exposure in the mechanical construction industry comes from:
   - Soldering
   - Servicing ductwork
   - Welding
   - Flame-torch cutting or grinding on surfaces painted with lead-based paint
   - Drilling or demoing lead painted surfaces

   True or False? _____

3. Work involving the removal or disturbance of any lead based products that would cause employees to be exposed above the PEL levels requires:
   - Awareness training
   - Engineering controls
   - Medical monitoring
   - Air sampling

   True or False? _____

4. Wear gloves and wash hands when working with lead cable, lead anchors, or sheathing. True or False? _____

5. If you MUST work with a lead hazard, or the possibility of one, the DRY method is the preferred choice to keep down dust exposure. True or False? _____

6. Always know what you are working in or around. Ask questions if you don't know. True or False?

7. Before you use a torch for cutting, safely remove/treat lead paint. Heating lead paint will produce lead fumes. True or False? _____

8. If employees are exposed to 50 micrograms of lead in the air over an eight-hour day, without wearing a respirator, employers must meet various OSHA regulatory requirements. True or False? _____

9. When respiratory protection is required, be sure that you have the required training, medical evaluation and fit test before starting work. True or False? _____

10. **NEVER** _____, _____ or _____ in work areas that contain lead products.
    a. Smoke, eat or drink
    b. Read, talk to your boss or text

    _____

11. **ALWAYS** wash your hands and face to remove any lead dust before smoking, eating, drinking or going to the bathroom. True or False? _____

12. PreTox is a special product that renders lead harmless. True or False? _____

13. Using local exhaust ventilation to reduce the PEL. True or False? _____

Printed Name: _____ **Trained by:** _____
Signature: _____ **Trained by Signature:** _____
Date: _____ **Location:** _____