

# Safety Alert

August 2016



## Management of lead paint structures

Lead paint commonly known as Red Lead was used extensively as an anti-corrosion paint on steel structures such as bridges until the 1970's, and may have since been covered by more recently applied non-lead based paint. Lead based paint can pose a health risk if it has deteriorated and become powdery or flaky, or when sanding or buffing of lead-based paint produces lead dust.

Where the structure was built prior to 1970 or if there is concern that lead-based paint is present, the paint should be tested to either verify the paint is lead-based or that lead is not present in the paint. If lead is present, VicRoads **must** ensure the lead exposure risks associated with the paint removal process are managed as per the OHS Lead Regulations.

If the paint is to be disturbed, such as from activities listed below, protective clothing including breathing protection and good hygiene practices are necessary along with good controls for capturing any released dust, mist or fumeS.

### What are the risks?

Lead- based paint, if inhaled or ingested in significant amounts, can cause acute or chronic health effects, lead is a cumulative poison.

There are two ways lead can get into the body:

- Inhalation (breathing of fine airborne dust, fumes or mist); and
- Ingestion (poor hygiene practices), dried lead containing paints cannot be absorbed through the skin; however, gloves should be worn at all times during work to reduce ingestion from hand-to-mouth contact. Hands should be washed to prevent ingestion when not working (through eating, smoking or biting finger nails).

### Activities That Can Disturb Lead-Based Paint

- Grinding;
- Abrasive Blasting;
- Burning / Gas Cutting;
- Manual Sanding;
- Welding;
- Demolition; and
- Vehicle crash repairs to structures.

### Lead Risk Jobs

"Lead processes" (reg. 4.4.2) can become a "lead risk job" (if the activity may result in employees blood lead levels exceeding certain numbers (reg. 4.4.17). An employer is required to determine whether the lead process is likely to become a "lead risk job".

Where a job is categorised as a "lead risk job" paint samples and laboratory tests are required to determine the lead levels and need to include all areas of the structure where the paint will be disturbed, as the percentage of lead can vary from location to location.

The employer is required to notify WorkSafe within 7 days after making that identification (reg.4.4.19).

*Australian Standard AS 4361.1 Guide to Lead Paint Management, Part 1 Industrial Applications provides good guidance.*

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## OHS Regulation 4.4.8 (Control of Lead Risk) States:

- (1) An employer must eliminate, so far as reasonably practicable, any risk associated with exposure to lead.
- (2) If it is not reasonably practicable for an employer to ensure that a risk associated with exposure to lead is eliminated, the employer must reduce the risk so far as reasonably practicable by:
  - a) Substituting lead with-
    - i. A substance that is less hazardous; or
    - ii. A less hazardous form of lead; or
  - b) Isolating employees from the source of exposure to lead; or
  - c) Using engineering controls to prevent or reduce employee exposure to lead; or
  - d) Combining any of the risk control measures in paragraphs (a), (b) and (c).
- (3) If an employee has complied with sub regulations (1) and (2) as far as reasonably practicable and a risk associated with exposure to lead remains, the employer must, so far as reasonably practicable, use administrative controls to prevent or minimise exposure to lead.
- (4) If an employer has complied with sub regulations (1), (2) and (3) so far as is reasonably practicable and a risk associated with exposure to lead remains, the employer must reduce the risk by providing to employees at risk appropriate personal protective clothing and equipment.

This is also the hierarchy of controls process.

## Summary

In summary the first consideration must be to eliminate the risk on structures where the lead paint samples exceed 1%. This could be achieved by removing the lead containing paint from the structure if the scope of the works would involve the whole of the structure, such as extensive corrosion remediation. Alternatively if works are limited to just a few locations on a structure, only remove the paint from the localised areas as applicable.

Records of the presence of lead on a structure shall be created, maintained and be readily accessible for future reference when disturbance of the paint may be proposed. This includes the WorkSafe notification of a lead-risk job which is to be retained for the period that the lead process is conducted at the workplace (reg.4.4.19).

The first option would enable safe access for works where the paint will need be disturbed in the future, without the need for costly on-going controls.

Because of the specialised nature of the work and need to comply with Regulations, Standards, Guidance Material, Lead Exposure Standard /Monitoring, Occupational Hygiene, Health Monitoring, WorkSafe Notification, etc., it is recommended that professional lead paint removalists be engaged to conduct and manage the works.

## Further Information from WorkSafe:

WorkSafe Health and Safety Solution Exposure to Lead – Abrasive blasting of large fixed structures coated with lead paint.

WorkSafe Code of Practice for Lead.

WorkSafe Managing Lead-Based Paint Removal .

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