

OSHA Directives

STD 3-8.1 - Welding, Cutting or Heating of Metals Coated with Lead-Bearing Paint

- **Record Type:** Instruction
 - **Directive Number:** STD 3-8.1
 - **Standard Number:** 1926.353(c)(2)(i); 1926.354(c)(1)
 - **Subject:** Welding, Cutting or Heating of Metals Coated with Lead-Bearing Paint
 - **Information Date:** 10/30/1978
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OSHA PROGRAM DIRECTIVE #100-53

To: REGIONAL ADMINISTRATORS/OSHA

Subject: Welding, Cutting or Heating of Metals Coated with Lead-Bearing Paint

References: (a) 29 CFR 1926.353(c)(2)(i) (b) 29 CFR 1926.354(c)(1)

1. Purpose

This directive explains the requirements imposed by the referenced sections of 1926.353 and 1926.354 when welding, cutting or heating is performed in an enclosed space on metals coated with lead-bearing paint.

2. Documents Affected

None.

3. Explanation

In the Construction Industry, the referenced sections of 1926.353 and 1926.354 apply jointly when welding, cutting or heating is performed in an enclosed space on metal coated with lead-bearing paint. Reference (a) requires employers to provide local exhaust ventilation or to protect employees with airline respirators. Reference (b) requires employers to ensure that the paint is stripped back at least 4 inches from the area of heat application or to protect the employees with airline respirators. A presentation on the dual impact of references (a) and (b) is in order.

4. Action

a. Sections 1926.353(c)(2)(i) and 1926.354(c)(1) have joint application when welding, cutting or heating is being performed in an enclosed space on metals coated with lead-bearing paint.

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b. There must be compliance with the following dual requirements:

(1) At all times, the toxic preservative coating must be stripped back at least 4 inches from the area of heat application (1926.354(c)(1));

(2) If the concentration of a substance in the breathing zone of the employee exceeds the threshold limit value (TLV) referenced in section 1926.55 (a), local exhaust ventilation must be provided in addition to the stripping back procedure (1926.353(c)(2)(i)).

c. When conformity with these requirements fails to reduce concentrations below the TLV, or when the techniques are impossible to implement, then employees must be provided with airline respirators.(See 1926.103 (a)(1).) All possible paint-stripping and provision of local exhaust ventilation must be continued even though it is determined that airline respirators must be used.

d. The area of heat application is interpreted to be the surface area that the flame or arc contacts.

e. In some instances it may be difficult to visually ascertain the edge of the area of heat application. In those instances where, because of this difficulty, it is uncertain from visual observations whether the lead-bearing paint is stripped back 4 inches from the area of heat application, the OSHA compliance officer shall mark the edge(s) of the stripped surface that is (are) distal from the center of heat application with temperature indicating crayons having a 500 deg. F melting point. Melting of the crayon markings shall be the criterion for affirming insufficient stripping of the lead-bearing paint.

f. Temperature indicating crayons may be purchased locally from scientific equipment supply houses. If help in locating a supply source is needed, contact the National Office at the telephone number given at the end of this directive.

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5. Effective Date

This directive is effective immediately and shall be retained until further notice. Questions may be directed to Mr. Gail M. Brinkerhoff of the OSHA Washington, D.C. National Office - 523-8098.

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