OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES

PROGRAM DIRECTIVE

Program Directive A-230
Issued July 1, 1997
Revised January 30, 2001

SUBJECT: Lead: Brass and Bronze Ingot Manufacturing Industry Compliance Requirements.

PURPOSE: This instruction changes compliance requirements and compliance dates for enforcement of the engineering and work practice controls provisions of the Lead Standard (29 CFR 1910.1025(e)(1)) in the brass and bronze ingot manufacturing industry.

NOTE: The stay on enforcement of paragraph (e)(1) of the Lead Standard as it applies to the brass and bronze ingot manufacturing industry has not yet been lifted by the court. Until the stay is lifted employers in this industry must continue to control lead exposures to 200 ug/m(3) solely by engineering and work practice controls, and to 50 ug/m(3) by some combination of engineering and work practice controls and respiratory protection. A follow-up instruction will be issued as soon as the stay is lifted.

SCOPE: This instruction applies OR-OSHA-wide.

ACTION: Regional Managers and Field Office Managers will ensure that the general inspection procedures in this instruction are followed and that compliance officers are familiar with the changes in employers' obligations under the engineering and work practice controls provisions of the Lead Standard in the brass and bronze ingot manufacturing industry. In addition, Regional Managers and Field Office Managers will ensure that compliance officers are aware that follow-up instructions will be issued informing them as to the date of the lifting of the judicial stay of paragraph (e)(1) as it pertains to the brass and bronze ingot manufacturing industry.

BACKGROUND:

1. On November 14, 1978, OSHA promulgated the Lead Standard (29 CFR 1910.1025)(43 FR 52952). The standard requires that employers achieve a permissible exposure limit (PEL) of 50 ug/m(3) based on an 8-hour time-weighted average (TWA)(29 CFR 1910.1025(c)), solely by means of engineering and work practice controls (29 CFR 1910.1025(e)(1)). The standard was challenged by industry and labor. Most aspects of the standard were affirmed by the U.S. Court of Appeals for the District of Columbia, including the PEL of 50 ug/m(3). United Steelworkers of America v. Marshall, 647 F.2d 1189 (D.C. Cir. 1980), cert. denied, 453 U.S. 913 (1981). In addition, the court upheld the feasibility of meeting the PEL solely by means of engineering and work practice controls for 10 industries, but found that OSHA had failed to establish feasibility for 38 other industries. The court remanded the record to OSHA for reconsideration of the feasibility of complying with paragraph (e)(1) and stayed enforcement of that paragraph for the 38 industries. (After re-categorizing and adding other industries, the remand industries total 45.)

2. In December 1981, OSHA published and filed with the court its statement of reasons that compliance with paragraph (e)(1) is feasible for all but nine of the remand industries (46 FR 60758). The nine industries were: brass and bronze ingot manufacturing/ production; collection and processing of scrap (including independent battery breaking), lead chemicals, lead chromate pigments, leaded steel, nonferrous foundries, secondary copper smelting, shipbuilding and ship repairing, and stevedoring. In March 1987, the court remanded the record to OSHA for further consideration of these nine remand industries.

3. On July 11, 1989, after notice and public hearings, OSHA published and filed with the court an additional statement of reasons that compliance with the PEL solely by means of engineering and work practice controls is feasible for eight of the remaining nine industries (54 FR 29142). In the ninth industry, nonferrous foundries, OSHA concluded that it is feasible for large nonferrous foundries to comply with the PEL by means of engineering and work practice controls. OSHA concluded, however, that it was not economically feasible for small nonferrous foundries to comply with paragraph (e)(1). On January 30, 1990, OSHA published and filed with the court its determination that achieving an 8-hour TWA airborne concentration of lead of 75 ug/m(3) is economically feasible for small nonferrous foundries. (55 FR 3146). Six of the nine industries challenged OSHA's finding (brass and bronze ingot manufacturing/production; collecting and processing of scrap; lead chemicals; leaded steel; nonferrous foundries; and secondary copper smelting). The remaining three industries (lead chromate pigments, shipbuilding and ship repairing,

and stevedoring) did not file challenges.

4. On March 8, 1990, in response to OSHA's finding, the court lifted the stay on paragraph (e)(1) for all remand industries (39 industries), except the six that challenged OSHA's feasibility findings. These 39 industries were given until September 8, 1992, two and one-half years after the lifting of the stay, to comply with the PEL by means of engineering and work practice controls.

5. On July 19, 1991, the court affirmed OSHA's feasibility findings for five the of six contested industries and lifted the stay on paragraph (e)(1) as it applied to them. AISI v. OSHA, 939 F.2d 975 (D.C. Cir. 1991). These industries were nonferrous foundries (large and small), secondary copper smelting, collection and processing of scrap (including independent battery breaking), leaded steel manufacturing, and lead chemicals manufacturing. Employers in the leaded steel and scrap collection and processing industries were given until January 19, 1994, two and one-half years after lifting of the stay, to achieve the PEL by means of engineering and work practice controls. Employers in the three other industries were given until July 19, 1996, to comply.

6. With regard to the brass and bronze ingot manufacturing (BBIM) industry, the court concluded that while OSHA had shown it is technologically feasible to achieve the PEL by means of engineering and work practice controls, OSHA had not shown that it is economically feasible to do so. The court remanded that portion of the record to OSHA for additional consideration and continued the stay of paragraph (e)(1) for this industry.

7. In response to the remand, OSHA reconsidered the existing record and concluded that an 8-hour TWA airborne lead concentration of 75 ug/m(3) is the lowest economically feasible level that can be achieved by means of engineering and work practice controls in the brass and bronze ingot manufacturing industry as a whole (60 FR 52856). On June 27, 1995, BBIM and ISRI (Institute of Scrap Recycling Industries) entered an agreement with OSHA acknowledging that this level is economically feasible for the industry as a whole.

8. Based on the existing record, OSHA also recognized that most employers in the industry cannot achieve the 50 ug/m(3) PEL without the

supplemental use of respiratory protection. In addition, OSHA recognized that it is probably not economically feasible to achieve even an 8-hour TWA of 75 ug/m(3) in the briquetting and baghouse maintenance operations by means of engineering and work practice controls. Therefore, OSHA would have the burden of proving economic feasibility of materially reducing existing air lead levels above 75 ug/m(3) by means of engineering and work practice controls in any enforcement proceeding under paragraph (e)(1) of the Lead Standard concerning these two operations.

9. In recognition of the economic feasibility constraints on the brass and bronze ingot manufacturing industry, OSHA is allowing employers six years from the date the court lifts the stay to comply with 75 ug/m(3) TWA by engineering and work practice controls. As soon as the court lifts the stay, the effective date for enforcement of the PEL will be six years from the date the stay was lifted. A follow-up instruction listing the new compliance date will be issued around that time.

INSPECTION GUIDANCE:

Not all provisions and paragraphs of the Lead Standard are included in this instruction. Refer to the Compliance Directive for Occupational Exposure to Lead CPL 2-2.47 and STP 2-1.94, the Lead Standard, and its Preamble for further guidance on specific subjects not covered here.

Inspections to assess compliance with the engineering and work practice control provisions of the Lead Standard in general industry, including the brass and bronze ingot manufacturing industry, must be done by a Compliance Safety and Health Officer (CSHO) appropriately trained in conducting inspections of the Lead Standard (e.g., thoroughly familiar with the relevant provisions of 29 CFR 1910.1025, particularly paragraph (e)(1), and with the guidelines in this instruction). Citations issued for violations of 29 CFR 1910.1025(e)(1) must be reviewed by the Field Office Manager.

1. Current compliance--The CSHO shall determine whether the employer in the brass and bronze ingot manufacturing industry is currently in compliance with the following items:

   a. The employer must be in compliance with all of the provisions of the Lead Standard. Compliance with

paragraph (e)(1) and the PEL of 50 ug/m(3) must be achieved and maintained by some combination of engineering controls, work practices, and respiratory protection in each operation where there is lead exposure, as specified in paragraph (c)(1).

b. The employer must be achieving and maintaining an 8-hour TWA of 200 ug/m(3) solely by means of engineering and work practice controls in each operation where there is lead exposure.

2. Compliance during years 1-6--Within the first six years after the judicial stay of paragraph (e)(1) of the Lead Standard is lifted by the court for the brass and bronze ingot manufacturing industry, the CSHO shall determine whether the employer in this industry is also in compliance with the following items:

a. The employer must provide interim and/or supplemental respiratory protection throughout the period in which engineering and work practice controls are being implemented where the employer cannot achieve and maintain the PEL solely by means of engineering and work practice controls.

b. Until the employer achieves and maintains control of air lead exposures to a TWA of 75 ug/m(3), the employer must submit to BBIM and/or ISRI air lead and blood lead monitoring data that is required to be collected under the Lead Standard. (NOTE: ISRI and BBIM, jointly or separately, shall annually provide the OSHA Office of Health Standards Programs with the monitoring data submitted by employers, in accordance with the terms of paragraph 12(F) of the settlement agreement.)

c. By the end of year 1--As soon as is practicable and, in any event, within one year after the judicial stay of paragraph (e)(1) of the Lead Standard is lifted for the brass and bronze ingot manufacturing industry, the employer whose air lead levels are above an 8-hour TWA of 75 ug/m(3) must take the following steps to reduce those levels to or below the 8-hour TWA of 75 ug/m(3), where doing so is low cost or no cost:

- Conduct an industrial hygiene evaluation;

- Improve work practices, which are to be written,

communicated to employees and followed;

- Improve housekeeping and preventive maintenance of ventilation and production systems;

- Control cross contamination.

3. Compliance after year 6--Six years after the judicial stay of paragraph (e)(1) of the Lead Standard is lifted by the court, the CSHO shall determine whether the employer in the brass and bronze ingot manufacturing industry is in compliance with all provisions of the Lead Standard, including the following items:

   a. The employer must achieve and maintain an 8-hour TWA of 75 ug/m(3) solely by means of engineering and work practice controls. (NOTE: In briquetting and baghouse maintenance operations, OSHA recognizes that it is probably not economically feasible to achieve an 8-hour TWA of 75 ug/m(3) by means of engineering and work practice controls. Therefore, OSHA would have the burden of proving the economic feasibility of materially reducing existing air lead levels above 75 ug/m(3) by engineering and work practice controls in any enforcement proceeding under paragraph (e)(1) of the Lead Standard for these two operations.)

   b. The employer must provide supplemental respiratory protection (APF sufficient enough to be in compliance with the PEL) to each employee in every operation where the PEL of 50 ug/m(3) cannot be achieved and maintained by engineering and work practice controls alone.