

Regulatory Update

Regulation Summary: Occupational Exposure to Beryllium-Final Rule

February 2, 2017

OSHA Regulation: 29 CFR Parts 1910, 1915, and 1926

On January 9, 2017, the U.S. Occupational Safety and Health Administration (OSHA) published a final rule for Beryllium and beryllium compounds. According to OSHA, the evidence in the record for this rulemaking indicates that workers exposed to beryllium are at increased risk of developing chronic beryllium disease and lung cancer. OSHA issued three separate standards – for general industry, for shipyards, and for construction – in order to tailor requirements to the circumstances found in these sectors.

The final rule:

- Establishes new permissible exposure limits of 0.2 micrograms of beryllium per cubic meter of air (0.2 µg/m³) as an 8-hour time-weighted average (TWA), down 90 percent from the former TWA of 2.0 µg/m³
- Establishes 2.0 µg/m³ as a short-term exposure limit determined over a sampling period of 15 minutes.
- Includes other provisions aimed to protect employees, such as requirements on employers for:
 - Exposure assessment
 - Methods for controlling exposure
 - Respiratory protection
 - Personal protective clothing and equipment
 - Housekeeping
 - Medical surveillance
 - Hazard communication
 - Recordkeeping

There were two areas where the final rule contained requirements not found in the proposed rule.

- (i) Respiratory Protection: OSHA added a provision in the final rule requiring the employer to provide a powered air-purifying respirator (PAPR) instead of a negative-pressure respirator where

respiratory protection is required by the rule and the employee requests a PAPR, provided that the PAPR provides adequate protection.

(ii) Personal Protective Clothing and Equipment: The proposed rule would have required use of protective clothing and equipment where employee exposure exceeds, or can reasonably be expected to exceed, the TWA PEL or STEL; where employees' clothing or skin may become visibly contaminated with beryllium; and where employees' skin can reasonably be expected to be exposed to soluble beryllium compounds. The final rule requires use of protective clothing and equipment where employee exposure exceeds, or can reasonably be expected to exceed the TWA PEL or STEL; or where there is a reasonable expectation of dermal contact with beryllium.

OSHA identified the following application groups as affected by the standard:

- Beryllium Production
- Beryllium Oxide Ceramics and Composites
- Nonferrous Foundries
- Secondary Smelting, Refining, and Alloying
- Precision Turned Products
- Copper Rolling, Drawing, and Extruding
- Fabrication of Beryllium Alloy Products
- Welding
- Dental Laboratories
- Aluminum Production
- Coal-Fired Electric Power Generation
- Abrasive Blasting

The rule was scheduled to become effective March 10, 2017. The Trump administration has pushed the effective date back to March 22, 2017. All obligations of the beryllium standards commence and become enforceable on March 18, 2018, except for:

- Change room requirements (required to be implemented by March 12, 2019)
- Engineering controls requirements (required to be implemented by March 10, 2020). In order to comply with the OSHA PEL, employers must use other controls including respiratory protection until the engineering controls are implemented.

Regulation updates for the three new standards will be produced and are expected to be completed by late-February 2017.