December 6, 2016

The Honorable Shaun Donovan  
Director  
Office of Management and Budget  
725 17th Street NW  
Washington, DC 20502

RE: OSHA Rulemaking Regarding Occupational Exposure to Beryllium and Beryllium Compounds (RIN 1218-AB76)

Dear Director Donovan:

On November 1, 2016, the Office of Management and Budget (OMB) began its review of the Occupational Safety and Health Administration’s (OSHA’s) final rule regarding Occupational Exposure to Beryllium, according to OMB’s website. This rule has been under development for 18 years, and with 45 days remaining in this administration, I write to urge OMB to complete its work on this long overdue rule. Further, it is imperative that OMB also ensures that the final rule includes coverage for shipyard workers.

In its August 7, 2015 Notice of Proposed Rulemaking, OSHA proposed a comprehensive health standard for beryllium-exposed workers employed in “general industry” which reduced the Permissible Exposure Limit (PEL) from 2.0 μg/m³ to 0.2 μg/m³ under 29 C.F.R. Part 1910. The current standard of 2.0 μg/m³ fails to protect workers from contracting chronic beryllium disease or lung cancer.

The Federal Register Notice invited comments on whether OSHA should add coverage under this proposed standard for shipyard industry workers under 29 C.F.R. Part 1915. The United Steelworkers Union, the AFL-CIO, the Shipbuilders Council of America, Newport News Shipyard, Bath Iron Works, and public interest organizations all support the inclusion of shipyards.
Dru Branche, Director of Environmental, Health and Safety for Newport News Shipbuilding wrote:

“Newport News Shipbuilding supports lowering the permissible exposure limits for beryllium as it applies to General Industry in the proposal and as it would apply to Shipyard Employment as presented in Regulatory Alternative #2b.”

This position was echoed by the Shipbuilders Council of America in its October 29, 2015 comments regarding this rule.

Robert Knowles, Environmental, Safety and Health Division, Bath Iron Works (General Dynamics) stated:

“Bath Iron Works supports Option 2b for modifying 1915.1000 in the Maritime Standards to reflect a change in the Permissible Exposure Limit for beryllium.”

The AFL-CIO stated:

“The AFL-CIO supports...a scope that includes all potential occupations with beryllium exposure, including construction, maritime, and industries that use materials with less than 0.1% beryllium by weight.”

The United Steelworkers (USW) Union stated:

“The agency should incorporate the maritime and shipyard industry into this rulemaking, and should consider that the exposure to beryllium and beryllium compounds occurs in far more workers than the previously cited figure of 949.”

The National Council for Occupational Safety and Heath wrote:

“OSHA should ensure greater protections to beryllium exposed workers by extending the scope of the proposed standard to workers in the construction and maritime industries.”

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The Public Citizen stated:

“Public Citizen urges OSHA to apply the PEL and the STEL, in addition to all ancillary provisions in the proposed rule, to the tens of thousands of construction and shipyard workers exposed to levels of airborne beryllium that can lead to lung cancer and CBD. Workers in these industries are often exposed to beryllium when performing abrasive blasting in outdoor settings.”

What is abundantly clear from the diversity of comments regarding shipyards is that there was adequate notice provided, and the support comes from industry, labor, and the public.

**The Need for Shipyard Worker Coverage**

Excluding shipyard workers from the beryllium rule would leave hundreds of workers unprotected from beryllium exposures in excess of the proposed PEL, including employees at the Newport News Shipyard in Virginia. Potential exposures to beryllium at shipyards may occur during welding, abrasive blasting, metal machining, working with and handling non-sparking tools, and possible exposures to legacy materials.

Abrasive blasting using materials that contain beryllium has the potential to affect the greatest number of shipyard workers. Abrasive blasting operations using coal and copper slag abrasives has increased in recent years as industry has looked for substitutes for silica-sand blasting abrasives. OSHA estimates that 949 shipyard workers may be directly involved in blasting operations at shipyards. This estimate includes operators, pot tenders, and cleanup workers, but does not include helpers and bystanders – a point raised by Safety Chairman Allen Harville and an abrasive blaster employed at the Newport News Shipyard during their March 22, 2016 testimony at OSHA’s rulemaking hearing.

A U.S. Navy study estimates that for ship building and repair, coal and copper slag account for 94 percent of blast media used in abrasive blasting. According to the National Institute for Occupational Safety and Health, coal slag – such as material marketed under the trade name “Black Beauty” – is the most commonly used abrasive blasting material. While coal slag contains only small amounts of beryllium (less than 0.1% by weight) the nature of abrasive blasting operations results in significant levels of beryllium in the air. OSHA’s analysis of exposures to beryllium during abrasive grit

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8 Navy Occupational Exposure Database, Naval Environmental Health Center, Norfolk, VA, August 24, 2000.
9 OSHA Preliminary Economic Analysis and Initial Regulatory Flexibility Analysis in support of the Notice of Proposed Rulemaking for Occupational Exposure to Beryllium, Chapter IV, Appendix C: Abrasive Blasting.
blasting at Navy facilities and a shipyard found that potential inhalation exposures frequently exceed the proposed PEL 0.2 μg/m³, as well as the current PEL of 2.0 μg/m³—a level which, if left in place for shipyard workers, presents an excessive risk.  

- Of the 57 samples available, the median exposure level was reported as 0.42 μg/m³ (0.03-66.5 μg/m³).
- Sixteen of the samples (28%) were greater than the current PEL.  
- Other studies support the conclusion that airborne concentrations of beryllium for abrasive blasting operations are in excess of the proposed PEL level of 0.2 μg/m³ and in many cases in excess of the existing PEL of 2 μg/m³.  
- On December 6, 2013, OSHA reported on beryllium exposures in the construction industry to the Advisory Committee on Construction Safety and Health (ACCSH). OSHA reported that 70% of inspected abrasive blasting worksites have detectable beryllium levels, with a mean level of 3.7 μg/m³ and a median of 0.6 μg/m³; 35% of abrasive blasting worksites were above the current PEL of 2.0 μg/m³. 

Some producers of coal slag have questioned whether OSHA should provide coverage for construction and shipyard workers who may be exposed to beryllium contained in abrasive blasting materials. They contend that the silicate form of beryllium in coal slag is not readily bioavailable due to its relatively low solubility characteristics. Evidence in the record for this rulemaking shows that abrasive blasting with coal slag poses a significant risk for adverse health outcomes, including beryllium sensitization and chronic beryllium disease.

In conclusion, the record is clear: there is a significant risk to shipyard workers from beryllium exposure at the current PEL based on scientific data, a more protective standard is feasible, and there is overwhelming labor, industry, and public support. In light of the record, it would be deeply troubling if a final beryllium rule excluded shipyard workers.

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11 OSHA (2014).
12 OSHA (2014), Table IV-C4.
13 NIOSH (1998): NIOSH/ KTA-Tator, Evaluation of Substitute Materials for Silica Sand in Abrasive Blasting. NIOSH evaluated coal slags (including Black Beauty) with and without the addition of a dust suppressant compound and reported a geometric mean airborne concentration of 2.040 μg/m³ for the entire coal slag category tested.
14 Meeker (2006): Comparison of Occupational Exposures among Painters Using Three Alternative Blasting Abrasives, Journal of Occupational and Environmental Hygiene, September, 2006. This study found beryllium in clean coal slag samples, and found task-weighted personal exposures outside of the blasters’ personal protective equipment that ranged from 2.5-9.5 μg/m³, with a mean exposure of 5 μg/m³.
15 NIOSH (2007). Crouch, Keith, et al. Evaluation of Substitute Materials for Silica Sand in Abrasive Blasting. This study considered exposures during abrasive blasting and found 8 hour TWA for blaster ranging from 0.029 to 2.1 μg/m³.
16 U.S. Department of Labor, Occupational Safety and Health Administration, Advisory Committee on Construction Safety and Health (ACCSH), December 5-6, 2013, transcript page 89.
Please contact Richard Miller at (202) 225-3725 if you have any questions.

Sincerely,

ROBERT C. "BOBBY" SCOTT  
Ranking Member  
Committee on Education and the Workforce

Cc: The Honorable Howard Shelanski, Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget  
The Honorable Thomas E. Perez, Secretary of Labor, U.S. Department of Labor  
Ms. Cecilia Muñoz, Domestic Policy Council  
Mr. Benjamin Olinsky, Domestic Policy Council