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From: Sent:

Monday, May 12, 2008 4:47 PM NIOSH Docket Office (CDC)

To: Subject:

120 - NIOSH Alert: Beryllium (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Dear sirs/mesdames -

My comments are below. Please note that they are my personal opinions and do not necessarily reflect Army policies.

1. Because Be is ubiquitous in the environment, it is likely to exist in detectable amounts in surface dust and soil at any location, and may be detectable in air samples under some conditions. Thus, for the purpose of this document, many ordinary materials could be identified as "beryllium-containing" particulate, fume, or solution; any workplace could be found to be "beryllium-contaminated;" and any worker could be found to be exposed to Be. Mineral-based construction materials such as concrete include naturally-occurring beryllium. Therefore, installing, maintaining, renovating, and demolishing structures may generate inhalational and dermal exposures that do not necessarily pose significant health risks. It is also unlikely that components and materials in which beryllium is an intentionally incorporated ingredient present a significant health hazard as long as they are not handled, used, or worked so as to release a significant amount of Be particulate, fume, or liquid.

The intent of this Alert is surely not to allow just about any workplace to be classified as a "beryllium workplace." To do so would cause risk communication crises as well as waste resources better devoted to other workplace hazards. Therefore:

- a. The Alert should include a discussion of the natural occurrence of beryllium. Points to make are:
- (1) Beryllium is an elemental metal that occurs naturally. Beryllium compounds are found everywhere in soils and rocks, and therefore are found in dust that everyone is exposed to, on or off the worksite.
- (2) We do not know whether any naturally-occurring form of beryllium poses a significant health risk. No cases of CBD have been attributed to exposures to naturally-occurring compounds although there has been no large-scale population survey to prove that. In a study of a beryllium mine and mill, no BeS or CBD was found among workers who were exposed only to dust from the raw ores.
- b. The Alert should contain definitions that exclude workplaces that contain only naturallyoccurring beryllium:
- (1) "Beryllium-containing materials" are components and materials in which beryllium or its compounds, or both, have been intentionally incorporated in order to take advantage of their physical or chemical properties.
- (2) A "beryllium workplace" is a workplace in which "beryllium-containing materials" are handled, used, or worked in a manner that could cause beryllium to be released.
- 2. It should be noted in the Alert that the PPE, respiratory protection, and hygiene programs that are already in place in many workplaces to protect workers from other hazards may also be effective for protection against beryllium hazards.

Thank you for the opportunity to comment on this Alert.