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From:
Sent: Monday, May 05, 2008 10:07 AM
To: NIOSH Docket Office (CDC)
Subject: 120 - NIOSH Alert: Beryllium

Attachments: NIOSH Be Alert



NIOSH Be Alert

Attached is a Microsoft Word document with my comments and suggestions concerning the draft "NIOSH Alert: Preventing Chronic Beryllium Disease and Beryllium Sensitization". Docket number NIOSH-120

These comments are my own and do not reflect those of my employer or any other organization or agency.

Respectfully submitted,

Comments on draft “NIOSH Alert: Preventing Chronic Beryllium Disease and Beryllium Sensitization”.

Docket number NIOSH-120

This is basically a well written document that covers the complex issues surrounding beryllium hazards in a clear and concise manner. It should be a valuable resource for both workers and management. There are, however, a few points that deserve comment:

1. Page iii, Workers, 4th bullet – *“Avoid the use of cleaning methods that may cause dust to become resuspended in air (dry sweeping, compressed air, and other dust-generating methods, for example).”*

This weak wording is not acceptable. This is not something that is to be merely “avoided”, this is an absolute “**DO NOT**”. In my 12 years experience providing industrial hygiene support to beryllium operations, I have found that cleaning tasks can generate significant levels of airborne beryllium and present perhaps the greatest risk of worker exposure. Workers and managers reading the word “avoid” are likely to interpret this as an option, and may chose cleaning methods based on convenience and cost, rather than on health risks. May I suggest a possible re-wording:

*“**DO NOT** use cleaning methods that may cause dust to become re-suspended in air (dry sweeping, compressed air, and other dust-generating methods, for example). Instead consider the use of HEPA filtered vacuums or wet cleaning methods that do not produce splash or spray.”*

2. Page iii, Workers, 6th bullet – *“Participate in medical surveillance so that risks related to job tasks can be identified and prevented.”*

While providing data to link exposure to disease is a valuable aspect of medical surveillance, the current wording of this bullet may make workers feel that they would just be guinea pigs in a big lab study. In my view as an industrial hygienist, the main reason for workers to participate in beryllium medical surveillance is to allow for early identification of BeS or CBD. With early identification of BeS, workers can make choices about preventing further exposure and possibly avoid disease. With early detection of disease, physicians can prescribe treatment that may slow progression and reduce severity. . May I suggest splitting this bullet into two sub-bullets:

“Participate in medical surveillance:

- *Medical surveillance allows for early detection of beryllium sensitization and disease. Early detection allows for eliminating further exposure and medical treatment which may prevent or reduce the severity of disease.”*
- *Medical surveillance helps identify high risk job tasks; allowing actions to be taken to better control or eliminate the risk.”*

3. Page iv, Employers, 9th bullet – See 1 above.
4. Page v, Employers, 2nd bullet – *“Establish and maintain a skin protection program to protect workers’ skin from contamination with beryllium dusts and solutions.”*

The three sub-bullets are all important parts of skin protection programs. However, the level of beryllium and the tasks will determine the specific requirements of a skin protection program. Showering facilities are not always necessary. Procedures and work practices are also important in preventing dermal exposure. May I suggest adding the following sub-bullets:

- *“Provide tools or handling equipment to prevent direct contact with beryllium.*
 - *Package all beryllium or beryllium wastes in sturdy, impermeable containers or wrapping.”*
 - *Clearly label all beryllium containing packages.*
5. Page 1, Background, 1st paragraph – “Risks may be associated with *all* beryllium-containing materials (including alloys of beryllium as well as beryllium metal and oxide materials) when these materials are heated or worked to create particles or fumes.”
I recommend adding “mists” to the end of this statement. This would then cover wet operations, use of beryllium solutions, and cleaning.
6. Page 9, Recommendations, Workers, 4th bullet – See 1 above.
7. Page 9, Recommendations, Workers, 6th bullet – See 2 above.
8. Page 10, Recommendations, Employers, 9th bullet – See 1 above.
9. Page 10, Recommendations, Employers, 13th bullet – See 4 above.
10. Page 14 – Including a brief glossary of terms might add value.

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Respectfully submitted,

