



The Pittsburgh AIHA held an afternoon presentation at the offices of AM Health and Safety in Pittsburgh on Thursday, November 15. Marc Kolanz, CIH from Materion spoke on Beryllium and the pending OSHA Standard. When I first heard about this talk, I admitted that I didn't know much about beryllium or its health effects and needed to know more why it was receiving so much attention recently.

Around 1935 researchers in Italy first reported beryllium causing a benign pneumonocosis lung disease in animals. In 1943 the US Public Health Service reported that beryllium itself was "not toxic" but that other materials used with it seemed to be causing dermatitis, conjunctivitis and lung disease among workers. Today we know that chronic beryllium poisoning is a systemic disease among some workers in the industry causing sarcoidosis-like symptoms having a significant latency period. Despite extensive study, medical experts are still unsure about the onset of this disease and the most effective ways to treat its symptoms.

Beryllium is the 4<sup>th</sup> element on the periodic table and the second lightest known metal, lighter than aluminum and six times stronger than steel. It also retains its shape under extremes of temperature, and is and scatters or absorbs radioactive elements making it ideal for the aerospace, electronics and nuclear industries. Copper beryllium is the most commonly used alloy of this material produced by two major manufacturers worldwide.



The OSHA Beryllium Standard has been in the works for many that is complicated by the fact that low levels of beryllium exist in clay soils, coal and gem stones (emeralds and garnet). Though not handling beryllium directly, industries using these other natural resources such as mining, painting, abrasive blasting, have reported beryllium exposures nearing the proposed OSHA action levels.



The good news is that the beryllium manufacturing industries have long understood the dangers to their workforce and have applied effective engineering and work practice controls to their processes thereby control exposures. In addition, most of the requirements imposed by the OSHA regulations, such as training, medical surveillance, housekeeping, protective clothing,

etc. have been in effect at beryllium manufacturing sites for many years.

AIHA Pittsburgh Section would like to thank Marc Kolanz for his insightful presentation and we would also like to thank Barry Momyer and AM Health and Safety for coordinating and hosting this event.