



September 30, 2010

**MEMORANDUM**

**TO:** Participants in the AIHA Beryllium Proficiency Analytical Testing (BePAT) Program

**FROM:** Natasha Mugambwa, Manager, AIHA Proficiency Analytical Testing Programs, LLC

**SUBJECT:** Beryllium Oxide Pilot Project

The AIHA PAT Board has tasked The AIHA PAT Programs, LLC with the collection of the analytical data for a beryllium oxide pilot project. We have completed all the groundwork for the pilot project which will happen concurrently with the final BePAT round of 2010. The samples for BePAT Round 24 will be shipping to all BePAT participants on November 2, 2010.

The pilot is designed to allow BePAT participants to evaluate their ability to handle and to consider appropriate analysis methods for BeO. The study will utilize NIST SRM® 1877, Beryllium Oxide Powder, as the solid standard reference material deposited onto a 37mm nitrocellulose air filter matrix. Data reporting instructions and other pertinent information will be provided with the samples.

The BeO sample analysis in the pilot round is mandatory but is intended for educational purposes only and will be scored as a "pass" for all participants. The PAT Board will evaluate the BeO data submitted by participants and will use this pilot as a mechanism to determine the path forward in integrating BeO into the regular BePAT rounds. The Board's vision for the BePAT program is to eventually transition from the acetate to the analysis of BeO filters by all BePAT participating laboratories. The Board is also considering provisions for those laboratories that analyze samples that do not contain insoluble forms of beryllium.

The AIHA PAT Programs, LLC is concerned for the safety of all participants and has put together a Safety Facts Sheet to guide your laboratory in handling the BeO material safely. We have also included the BeO MSDS for your laboratory. The MSDS should be thoroughly reviewed by laboratory personnel prior to handling any beryllium oxide materials.

Please visit the AIHA PAT Programs, LLC's BePAT website <http://www.aihapat.org/bepat/Pages/default.aspx> to access the Beryllium Health & Safety Committee's BeO Round Robin Summary Report.

Thank you for your continued participation in the BePAT program.

## **Beryllium Oxide Safety Fact Sheet**

### **CAUTION:**

The BeO Pilot Project filters have been spiked with a beryllium oxide standard suspension. The BeO samples should only be handled by laboratory personnel trained in safe handling practices for hazardous substances, using appropriate personal protection equipment.

Exposure to particles, fumes or solutions of beryllium-containing material may cause chronic beryllium disease (CBD), a potentially disabling, or even fatal respiratory disease. Inhalation of beryllium oxide dust is known to cause acute health effects and beryllium compounds are known carcinogens in laboratory animals and in humans and proper laboratory handling controls should be used when handling these samples.

Care should be taken to prevent inhalation of beryllium dust or fumes and skin exposure to beryllium oxide materials. All sample handling steps should occur in a laboratory fume hood or other appropriate containment apparatus. Use all ventilation and exhaust equipment available in order to reduce exposures to the lowest possible level. Do not eat, drink or smoke in areas where beryllium is in use.

The beryllium oxide deposited onto these filters should be stable and the powder should not be easily removed from the filter. Keep all handling steps involving the samples to a minimum until the sample analysis process begins.

**Please also reference the beryllium oxide MSDS for additional important information about the BeO materials.**