

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MARCH 10, 1989

Mr. Joseph E. Cothorn  
Environmental Protection Specialist  
Department of the Air Force  
HQ Aerospace Guidance and Metrology Center (AFLC)  
Newark Air Force Station, Ohio 43057-5000

Dear Mr. Cothorn:

This letter is in response to your letter dated February 2, 1989, in which you requested an assessment and characterization of beryllium wastes generated at Newark Air Force Station.

In follow-up conversations with you on February 10, 1989, and February 13, 1989, to obtain more information related to the process involved, you indicated that the beryllium is generated in the form of a very fine dust. In order to meet the Occupational Safety and Health Administration worker protection standards and the National Emission Standards for Hazardous Air Pollutants, the airborne dust is collected by vacuum hoods and directed through a two-stage filtration system. As I understand the vacuum-filtration process, the system consists of the following components:

- vacuum hood
- 10-foot tube
- air trap
- cyclone hopper (with a bag filter located on top of hopper)
- collection container
- vacuum unit (with three filters inside)

The dust-laden air initially enters the vacuum hood located on the ceiling of the grinding/polishing room and travels up the 10-foot tube. It then enters an air trap in which heavier particulate matter is collected. The lighter air-suspended particles are then channeled into a cyclone hopper. A bag filter is situated at the top of the hopper. This is the first filtration stage. The vacuum unit, which provides suction for the entire system, is attached to the outside of the hopper. The vacuum unit houses the final filtration element, which consists of three filters. This second filtration stage traps the remaining dust in the air before it is discharged into the ambient air.

The collection container is detached from the hopper and vacuum unit when it is filled to capacity with dust, two percent of which is beryllium. It is then replaced with a new container. The

subsequent management practice is to stabilize/solidify the dust in cement prior to disposal. The container filled with concrete (stabilized dust) is then sent off-site to a disposal facility.

The final filtration element, on the other hand, has never been replaced since the start-up of the operation. As I understand the current operating procedures, the final filtration element will eventually be discarded when gross dust contamination renders it useless.

The materials that you wish to characterize are the final filtration element, the beryllium dust, and the dust collection container. To identify the materials as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act, they must first be classified as solid wastes under 40 CFR Section 261.2. Based on information you provided over the phone, the final filtration element, the solidified dust (concrete), and the container holding the concrete are abandoned by land disposal and, therefore, meet the definition of solid waste [40 CFR Section 261.2(b)(1)].

Based on the additional information you provided over the phone about the subassembly grinding/polishing and air filtration process, I have concluded that the dust is not a commercial chemical product (i.e., P015) and is not any other listed hazardous waste identified in 40 CFR Part 261, Subpart D. (The solidified dust, the container holding the solidified dust, and the final filtration element contaminated with dust also are not RCRA listed hazardous wastes. If the dust does not exhibit a hazardous waste characteristic (prior to solidification) as defined in 40 CFR Part 261, Subpart C, the dust is not a hazardous waste and is not regulated under RCRA Subtitle C. Also, if the filter element contaminated with the dust does not exhibit a hazardous waste characteristic once rendered useless, it is not regulated under Subtitle C of RCRA.

If the dust and the filter element do exhibit a hazardous waste characteristic, then the material must be managed according to RCRA Subtitle C regulations. The solidification of the dust with cement would then be treatment of a hazardous waste and a RCRA permit may be required.

The above information lays out the applicability of Federal regulations pertaining to the materials in question. Please be advised that States may have regulations that are more stringent or broader-in-scope than those of the Federal government. You should contact the appropriate State agency to determine the applicability of their regulations.

If you have any additional questions, please contact Steve Cochran of my staff at (202) 475-8551.

Sincerely,

Devereaux Barnes, Director  
Characterization and Assessment Division