

POLREP 03

WRG4 Vermiculite Assessment

WR Grace/Zonolite Co. Ellwood City Facility

12th and Factory Street

Ellwood City, Lawrence County, PA 16117

Latitude: 40° 51'34.44" N; Longitude: 80° 18'0.03"W (revised)

Event: Removal Assessment

Attn: EPA Region III RRC and 3HS32 Section Chief

I. SITUATION (as of December 30, 2002)

- A. Based on findings of asbestos-contaminated vermiculite at a WR Grace mine in Libby, Montana, an EPA agency-wide evaluation of past and operating vermiculite facilities in the United States which received ore from the Libby mine was initiated in 1999. The WR Grace/Zonolite Co. Ellwood City facility was reported to have received vermiculite ore from the Libby mine and operated as a expanding facility from 1954 to 1969.
- B. The Site is currently used by a trucking company for short term storage.
- C. A windshield assessment of the Site was conducted on April 3, 2000.
- D. A preliminary assessment was conducted at the Site in October of 2000. Two (2) bulk samples were collected and analytical results identified 2 % tremolite asbestos in one (1) of the bulk samples and non-detect in the second bulk sample.
- E. EPA conducted a second sampling event on May 22, 2002 based on the presence of tremolite in the samples collected at the facility and the reported volume of vermiculite ore previously processed at the facility. TEM analytical results showed one sample contained protocol chrysotile asbestos, excluded asbestos structures and non-regulated amphiboles also termed "Libby Amphiboles". Four additional samples were also identified as containing the Libby amphiboles.
- F. Based on ATSDR recommendations, previous soil samples have been analyzed utilizing the PLM method and air sampling inside the former vermiculite expansion facility was conducted.

II. ACTIVITIES

- A. Validated PLM analytical results on the six soil/bulk samples collected in May 2002 were received on November 26, 2002. Three of the six samples showed asbestos fibers (actinolite/tremolite) at less than 1 percent (< 1%).
- B. On November 1, 2002, START shipped the two air samples to R. J. Lee Group Laboratory in Monroeville, PA for TEM analysis using NIOSH Method 7402 for total asbestos structures. DAS Laboratory was procured through the EPA CST under Case No. R31407.
- C. On or about November 6, 2002, START and OSC Carlson were notified that the air samples could not be analyzed since the filter cassettes were shredded. Discussions with the manufacturer of the cassettes indicated that moisture or metal particles may have

- shredded the filters.
- D. Site access was coordinated with Mr. Phil Berezniak, attorney for the current property owner to re-conduct the air sampling.
 - E. On November 20, 2002, START Wilcox arrived at the Site at 1030 hours to re-conduct the air sampling. Air sampling locations were identified in the same areas as the previous October air sampling event. One air sample was to be collected on the east end of the main storage area near the roll up doors. A second sample was to be collected near the southwest corner of the main storage area.
 - F. At approximately 1100 hours, START Wilcox began the air sampling. The samples were collected using a 0.45 micron cellulose ester filter inside a button sampler connected by tygon tubing to a Dawson® hi-flow air pump. The pumps were calibrated using a Sensidyne hi-flow calibrator kit both prior to and after sampling. The air was agitated inside the building by opening one of the roll up doors and having a box fan blow air across the warehouse. The samples were collected at an approximate height of five feet to simulate the breathing zone. The flow rate used during the sampling was 3 liters of air per minute (LPM), a lower flow rate than was used previously.
 - G. At approximately 1530 hours, the air sampling was complete. Total time of sampling was 4.5 hours for a total air volume collected of 800 liters. START Wilcox demobilized from the Site.
 - H. On November 25, 2002, START shipped the two air samples to R. J. Lee Group Laboratory in Monroeville, PA for TEM analysis using NIOSH Method 7402 for total asbestos structures.
 - I. On November 26, 2002, START shipped the two air samples to R. J. Lee Group Laboratory in Monroeville, PA for TEM analysis using NIOSH Method 7402 for total asbestos structures.
 - J. A complete validated data package for the air sampling results was submitted on December 17, 2002. Both air samples were reported as non-detect for asbestos fibers.

III. FUTURE ACTIONS

- A. OSC will consult with ATSDR regarding the findings from the additional assessment activities and determine future activities for this Site.

Deborah Carlson, OSC
USEPA Region III
Wheeling, WV