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POLREP#1 AND SPECIAL BULLETIN A
Borit Asbestos Tailing Pile
Ambler, PA 19002

ATTN: Abraham Ferdas, Director
Hazardous Site Clean-up Division (3HS00)

THRU: Dennis Carney, Associate Director
Preparedness and Response Office (3HS30)

THRU: Gerald Heston, Chief
Eastern Response Branch (3HS31)

FROM: Eduardo Rovira, Jr., OSC
Eastern Response Branch (3HS31)

I. Issue

In April 2006, EPA Site Assessment group conducted a baseline sampling event at the Borit Asbestos Tailing Pile Site. The site consists of a waste pile, the bordering reservoir, and the adjacent Whitpain Park with three separate property owners. The results showed the presence of asbestos in the air, soil, surface water and sediments. In addition, asbestos and asbestos tiles are easily seen throughout the entire site.

The release meets the criteria for conducting a removal action under Section 300.415 of the NCP. The OSC has determined that immediate funds are needed to mitigate the threat posed to human health and the environment. The OSC has authorized a budget for the removal action not to exceed \$250,000, in accordance with EPA redelegation of authority 14-2.

The Special Bulletin documents the scope of work needed to complete the removal action to protect public health and the environment.

II. Background

A. Site Description

The site is located on Maple Street in Ambler, PA and is in the vicinity of the Ambler Asbestos National Priority List (NPL) site. The entire Borit Asbestos Tailings Pile site consists of a waste pile, the bordering reservoir, and the adjacent Whitpain Park with three separate property owners. An area next to the waste pile was used by Ambler Borough as a trash transfer station. The entire site was formerly used to dispose of asbestos-containing materials.

B. Site Background

EPA conducted sampling on December 8, 1983 and subsequent sampling was performed by PADEP on May 6, 1984. Both sampling events confirmed results which were positive for asbestos.

PADEP issued a Notice of Violation to the owner (at the time, Nicolet, Inc.) of the site dated August 13, 1984 for non-compliance with air regulations, i.e., no warning signs and no fencing.

A Preliminary Assessment was performed by EPA on March 30, 1987. The actual asbestos pile was vegetated, primarily with vines, and was approximately 2.5 acres in area and 35 feet in height. A chain link fence was present; however, there was evidence of unauthorized access.

A Site Investigation was conducted by EPA on October 27, 1987. Only solid and aqueous samples were obtained from the site. The solid samples did show the presence of asbestos; however, the aqueous samples did not show any significant levels of asbestos.

A Hazard Ranking Score (HRS) screening score was below 28.50 (the threshold score for possible inclusion on the National Priorities List (NPL) due to a lack of an observed release to the surface water or groundwater. The site also had a vegetative cover which would reduce a release of asbestos via the air pathway.

For approximately 20 years, PADEP has been the lead for the site using the National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations, which require the site to be fenced, to have a vegetated cover and signs indicating the presence of asbestos.

During 2005, a developer was interested in constructing multi-story housing on the site of the waste pile. The nearby residents were concerned about potential exposure to asbestos during construction activities; however, after subsequent local meetings, the zoning ordinance was not passed for housing construction.

EPA and PADEP discussed the proposed cleanup and redevelopment plans during a meeting held on August 22, 2005. It was decided that at a minimum, baseline sampling including obtaining air, water, and soil samples, would be performed to establish the current conditions of the entire site prior to any redevelopment opportunities.

After the meeting, it was decided that the PADEP Act 2 Program would be the lead for the site with EPA assistance as necessary. There was also funding available through the Brownfields Program for the local municipalities to use through the County for assessment purposes.

Interest from residents and political representatives increased since there were additional discussions involving potential development in the vicinity of the waste pile. Since PADEP did not have enough money to conduct the baseline sampling event of the entire site, EPA decided to do it.

EPA representatives conducted a sampling event of the Borit Asbestos Tailings Pile site on April 20 and 27, 2006. Air, soil, sediment, and surface water samples were collected during the event.

The results from the sampling event were received by EPA on July 21, 2006, and distributed to the Agency for Toxic Substances and Disease Registry (ATSDR), and a Regional toxicologist for review in relation to risk factors and human exposure.

A preliminary review of the air samples indicates that the results for asbestos are elevated above background levels for urban areas. However, the data results are based on an interpretation of the air samples using the “indirect method” versus the “direct method.” In the indirect method the collected material is physically separated into smaller fiber bundles and fibrils that can be more accurately identified, counted, and sized by transmission electron microscopy. In the direct method the sample is processed as a whole. Four of the six air samples were overloaded with dust/particulate and the indirect method for analysis was used for those samples. The direct method for analysis is preferred for conducting an evaluation to determine human exposure to asbestos. However, in cases where the sample is overloaded, the indirect method may be used to interpret the sample. The indirect method usually produces a higher result for the analysis. Collection and analyses of the samples were performed according to EPA-approved methods.

C. Types of Substances Present

Asbestos (Chrysotile structures) have been found in air, soil and water samples.

Chrysotile is a fibrous mineral which does not burn or rot. It is resistant to most chemicals, it is flexible and possesses high tensile strength. This unique combination of properties makes chrysotile an extremely useful material which has been established, for many decades, as a major component of lightweight reinforced cement products, friction materials, high temperature seals and gaskets and a host of other applications.

Chrysotile has been known for over 2000 years, being used initially for cremation cloths, oil lamp wicks and other textiles. But it is only in the 19th Century that chrysotile was first mined commercially in the Urals (Russia), in Italy and in Canada.

D. National Priorities List

In the 1980s the site score was below 28.50 due to a lack of an observed release to the surface water or groundwater. The site also had a vegetative cover which would reduce a release of asbestos via the air pathway. Therefore, the Borit Asbestos Tailing Pile was not listed on the NPL. Currently, there are no plans to list the site.

E. State and Local Authorities Roles

The Pennsylvania Department of the Environment (PADEP), Southeast Region, requested EPA assistance with assessing the site in question. EPA continues to coordinate efforts with PADEP, and other Federal, State and local authorities regarding developments at the Site.

III. Threats to Public Health or Welfare or the Environment

Section 300.415 (b) (2) of the NCP, 40 C.F.R. § 300.415 (b) (2), identifies factors to be considered in determining the appropriateness of a removal action. Paragraphs (i) and (vii) of that section directly apply as follows to the conditions at the Borit Asbestos Tailing Pile Site:

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Asbestos were found in air, soil, surface water and sediment samples. In addition, asbestos and asbestos tiles can be easily seen on-site.

Chronic (long-term) inhalation exposure to asbestos in humans can lead to a lung disease termed asbestosis, which is a diffuse fibrous scarring of the lungs. Symptoms of asbestosis include shortness of breath, difficulty in breathing, and coughing. Asbestosis is a progressive disease, i.e., the severity of symptoms tends to increase with time, even after the exposure has stopped. In severe cases, this disease can lead to death, due to impairment of respiratory function.

Other effects from asbestos exposure via inhalation in humans include pulmonary hypertension and immunological effects.

Cancer is a major concern from asbestos exposure, as inhalation exposure can caused lung cancer and mesothelioma (a rare cancer of the thin membranes lining the abdominal cavity and surrounding internal organs), and possibly gastrointestinal cancer in humans.

- (vii) The availability of other appropriate federal or state response mechanisms to respond to the release;

The Pennsylvania Department of the Environment, Northeast Region, has requested EPA assistance to provide technical expertise and financial resources in assessing and responding to the release.

IV. Determination of Emergency

The OSC has determined, based upon information sampling results and visual assessment, that a hazardous substance has been released to the environment. The Site conditions constitute an emergency.

V. Proposed Actions and Estimated Costs

A. Actions

1. Conduct a site reconnaissance to identify the areas in need of stabilization to stop erosion and migration of asbestos into adjacent watersheds.
2. Implement stabilization activities identified in #1, above.
3. Obtain additional samples to adequately evaluate human exposure.
4. Evaluate the need for and scope of additional actions necessary to protect public health and the environment.

B. Estimated Costs

	Ceiling
ERRS	\$ 50,000
START	\$ 25,000
UNALLOCATED	<u>\$175,000</u>
	\$250,000

C. Contribution to Remedial Performance

A remedial action is not anticipated and therefore this removal action is not inconsistent with any proposed remedial action.

D. Compliance with ARARS

The removal action will comply with all Applicable or Relevant and Appropriate Requirements (ARARs), to the extent practicable, considering the exigencies of the situation.

VI. Expected Change in the Situation should No Action be Taken or Action Delayed

If no action were taken, or action delayed, at the Site, nearby residents could be exposed to asbestos contamination.

VII. Outstanding Policy Issues

No outstanding policy issues.

VIII. Enforcement

The Office of Enforcement has taken the lead of the enforcement process. The Office is currently investigating PRPs and will notice them of their potential liability.