United States Environmental Protection Agency
Region II
POLLUTION REPORT

Date: Thursday, March 15, 2007
From: Thomas Budroe

Subject: Michelin Power House Site- PolRep #2
Michelin Power House Site
2 - 130 Ford Avenue, Milltown, NJ
Latitude: 40.4484653
Longitude: -74.4421799

POLREP No.:	2	**Site #:**	US
Reporting Period:	08/29/06-03/05/07	**D.O. #:**	
Start Date:	10/28/2005	**Response Authority:**	CERCLA
Mob Date:	6/5/2006	**Response Type:**	Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:	NJC200400034	**Contract #**	
RCRIS ID #:			

Site Description

1. Site Location

The Michelin Power House Site is located at 2-130 Ford Avenue, Milltown, Middlesex County, New Jersey, in the former Michelin Tire industrial facility on the southern side of Ford Avenue. The Site is designated as Block 58, Lot 1.01 in Milltown, Middlesex County, New Jersey. The Site includes the Power House, which is one building divided into two portions. One portion is labeled Building No. 9 and the other Building No. 10. The Site includes everything inside the Power House Building and all appurtenances connected to this building, as well as the approximately 100,000 gallon above ground oil storage tank (AST) east of the building, any underground storage tanks (USTs) found during the removal action, the two smokestacks and water tower south of the building and all areas within Lot 1.01 affected by a release from the aforementioned. The Site is bounded to the east by heavily vegetated areas along the bank of Mill Pond. Further to the east lies Main Street. Buildings 6 and 7 on Block 58, Lot 1.03 are located directly across old rail tracks and an internal roadway to the north/northwest of the Site. Directly adjacent to these buildings is a chapter of the United Way along Ford Avenue. Residential homes and small retail stores are located on the north side of Ford Avenue. The Mill Pond is approximately 150 feet southeast of the Site. Across the Mill Pond, also known as Lawrence Brook, are numerous single family homes along the pond's eastern shore and the Mill Pond Park.

2. Description of Threat

Analytical results of samples collected by EPA inside and around the Power House Building indicate that hazardous substances, mainly friable asbestos, arsenic, lead and mercury are present in concentrations which may endanger public health and the environment. Analysis of the friable asbestos pipe insulation inside the building indicates the asbestos to be amosite and chrysotile ranging from 5% to 75% and 5% to 40% respectively. The maximum concentrations of arsenic and lead in soil outside the Power House Building were detected at 598 ppm and 4,160 ppm respectively. Mercury in the sample of ash collected from the smokestack was reported at 7.3 ppm. These hazardous substances, as defined by Section 101(14), of CERCLA, are listed in Table 302.4 of the NCP. The mechanisms for past releases to the environment include air emissions, discharges onto the ground surface and poor facility operations/waste management practices. These mechanisms are further compounded by the abandoned state of the facility and the continued deterioration due to weather exposure.

Much of the asbestos containing material (ACM) located on Site is extremely degraded due to exposure to the elements over the past 25 years. Erosion by wind and precipitation has resulted in friable asbestos migrating out of the Power House Building. The deteriorated condition of the Power House Building and the continued exposure to the elements provides a route for the air currents to influence the condition and migration of the ACM. The extremely poor structural condition of the Power House Building, the large quantity of degraded asbestos containing materials inside the building and the confirmation of asbestos fibers in soil samples collected in the area between the Power House Building and Mill Pond indicate a release from the Power House Building. The migrating asbestos could impact unprotected persons that access the Site. The most significant human exposure pathway for asbestos is the inhalation of respirable

asbestos fibers. Once released, asbestos fibers can remain in suspension for long periods and can be transported long distances. As a result, people in nearby residential communities and commercial areas could be affected.

The ingestion of fibers may also be an exposure pathway of concern for individuals who come into direct contact with ACM on the Site. Individuals that come in contact with asbestos on the Site may transport asbestos off-Site on their clothing and/or shoes and expose other individuals. Site observations suggest ACM has been tracked outside of the Power House Building by trespassers.

Strong evidence suggests that inhalation exposure to asbestos fibers increases the risk of respiratory cancer, mesothelioma and possibly gastrointestinal cancer. The Agency for Toxic Substances and Disease Registry considers asbestos to be a known cancer causing substance with a latency period of 10 to 40 years between exposure and the onset of the disease. According to the National Institute for Occupational Health and Safety (NIOSH), evaluation of all available human data provides no evidence for a "safe" threshold for asbestos exposure.

There is the potential for the contamination of a drinking water supply as a result of the release of hazardous substances at the Site. The Mill Pond, which is located 150 feet south of the Power House Building, is part of the Lawrence Brook Watershed System. This water source is used by the New Brunswick Water Utility public water supply to provide water to Milltown, North Brunswick, New Brunswick and Franklin Township. The known release of asbestos from the Power House Building could potentially contaminate this water source. Soil sampling indicates asbestos contamination has already migrated outside of the Power House Building into the soil adjacent to the pond. Asbestos fibers in the soil outside of the buildings could become airborne directly from the soil during dry windy conditions and be blown into Mill Pond. In addition, surface water run-off from the Site into Mill Pond during heavy rain events could transport asbestos and heavy metal contaminated soil into the Pond from the area south east of the Power House Building.

There is a threat of fire in the Power House Building. A fire in the remaining structure on the Site containing significant amounts of asbestos could result in the generation and release of a large airborne plume of smoke containing asbestos fibers. This plume could easily migrate off site into neighboring communities causing widespread exposure to high levels of airborne asbestos. The site has a history of fires associated with vandalism.

C. Preliminary Assessment/Site Inspection Results

The Removal Action Branch, within the U.S. Environmental Protection Agency (EPA) Region II, received a request from the EPA Brownfields Coordinator for Middlesex County, New Jersey in October 2003, to evaluate the Site for removal action eligibility under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). A Removal Site Evaluation (RSE) was initiated in March 2004, and a final RSE report was issued on May 12, 2004. The RSE concluded that a release of hazardous substances has occurred at the Site which has resulted in a substantial threat to the public and the environment and a CERCLA removal action is warranted.

The Site is located in an industrial park comprised of approximately 20 different buildings of which less than half are currently occupied. Beginning sometime in the late 1800's and ending in 1977, the Power House which is labeled Building No. 9 and Building No. 10 served as the power generating station for the entire industrial complex. In 1977, the industrial park was connected to the local power grid and the Power House became obsolete and was abandoned. Access to the Site is unrestricted and local officials have reported that it is frequented by local youth.

The Power House Building contains extensive asbestos thermal insulation material inside the building which has degraded and fallen from elevated tanks and piping onto the floor. Several ruptured fifty-five gallon drums are present in a section of the building having extensive areas of petroleum staining. Numerous overhead and floor level tanks and boilers fill the interior of the structure. Coal waste and construction debris are also present in piles around the building. There are two large flooded subterranean vaults beneath the building on its east and west ends.

Nine total bulk soil samples were collected for asbestos analysis during the RSE. Six were collected inside the Power House Building and the remaining three were collected outside the south entrance of the building. Each of these samples also showed the presence of asbestos fibers. The interior sample results indicated between 40 and 75% total asbestos fibers based on Polarized Light Microscopy (PLM) bulk asbestos analysis. The samples collected outside the Power House Building contained both chrysotile and amosite fibers based on qualitative Transmission Electron Microscopy (TEM) analysis. It is apparent based on this sampling that ACM has migrated outside of the building into the environment.

A 100,000 gallon AST, two large brick smokestacks, a steel water tower and an unpaved area between the building and the Mill Pond are also located on the Site. The AST contains oil sludge in its bottom as well as degrading, potentially asbestos containing, thermal insulation on outdoor piping which connects the AST to the Power House Building. Petroleum stained soil and tar-like product are also visible surrounding the AST. Despite the observation of significant petroleum contamination of soil and widespread product on the ground around the AST, there are no obvious signs of migration to the Mill Pond located 100 feet to the south. No sheen on the water has been observed or reported by local officials and the soil sample adjacent to the pond collected during the RSE showed no evidence of contamination.

Arsenic at 91 ppm and mercury at 7.3 ppm were reported in samples collected from the ash in the base of the stacks. The water tower is potentially coated with lead based paint and soil contaminated with arsenic at 598 ppm and lead at 4,160 ppm were detected in soil underneath the water tower.

As mentioned earlier, large quantities of friable asbestos have been found inside the Power House Building. Much of the ACM is damaged and degrading due to age and exposure to the elements. The building has deteriorated since its operations shut down resulting in breaches opening up the building interior to the outside elements. The primary mechanism for the release of asbestos to the environment is from the effects of weathering on the extensive interior piping and tank insulation wraps. The deterioration of these materials has resulted in the spread of asbestos to building interior floors, outside surface soils and ambient air. Asbestos fibers can exit the building through the many breaches when disturbed by natural wind events or man-made disruption. Trespassers accessing the building have walked in contaminated areas and may have tracked ACM from inside to the outside of the building. Damaged and deteriorating friable asbestos containing insulation material was observed in soil, debris piles and on piping outside the building to the east.

Conditions at the Site pose a health threat to unprotected individuals who may be exposed to friable asbestos being released at the Site. Based on the information collected during the RSE, a CERCLA removal action is warranted at the Site.

Current Activities

In addition to the activities reported since the last polrep, debris was removed from the passageways to the smaller rooms adjacent to the main boiler room. These smaller rooms were subsequently sealed-off and isolated. Once the main room was isolated, the crew began focusing on removing the ACM from the building's steel superstructure and overhead pipes and equipment.

An information availability session was hosted by the EPA at the Milltown Municipal Building. The availability session was moderately attended and went well. The OSC also attended a public meeting regarding the Site which was sponsored by the Edison Wetlands Commission.

The PRP collected samples of ash from both of the two smokestacks for analysis. Weston collected split samples and DESA conducted the analysis. The sampling results evidenced total arsenic and lead as high as 93.7 ppm and 315 ppm respectively.

After the abatement of the overhead ACM sources was completed, the abatement crew removed the asbestos insulation from the boilers. Once the asbestos insulation was removed, the boilers were inspected. The inspection evidenced that two of the boilers contained a second layer of asbestos underneath a sheet metal jacket. The abatement crew subsequently cut the sheet metal covering off the boilers and removed the second layer of ACM.

Powerwashing of the building interior was then conducted for approximately two weeks. After being informed that the building interior was almost ready for a visual clearance inspection by the asbestos air monitoring subcontractor, the OSC conducted a visual inspection of the boiler room. During the inspection the OSC observed suspected ACM "mud" insulation around the heat exchange pipes inside the boiler. Remnants of asbestos were also observed on the building superstructure and on equipment at various locations inside the building. Several horizontal surfaces were observed which also required additional cleaning. An open-top coal storage bin running the length of the boiler room also needed to be evaluated for potential contamination. The PRP's contractor was made aware of these issues and except for the coal hopper, they were addressed.

EPA's START contractor conducted a radiological scan of the powerhouse building interior on 1/5/07 using a Ludlum Model 19. Readings up to 200 micro R/hr were reported in boiler number 2 and in the smokestack (background was approximately 10-15 micro R/hr). As a result of the elevated readings a second radiological scan was conducted on 1/8/07. Three Ludlum Model 19 instruments were used to

ascertain the accuracy of the readings. During the scan the readings in boiler 2 and the smokestack were reported at 20 to 35 micro R/hr. START could not explain the variation in the readings between the two days. The PRP was tasked to provide a supplement to the Safety Plan to address the situation. Until the Safety Plan has been addressed no work could be conducted in the suspected hot areas.

The crew subsequently began focusing on cleaning the building's floor and began cutting-up extraneous metal pipes and metal equipment and decontaminated same prior to recycling.

The PRP's contractor was slow to provide EPA with a sampling plan for the coal storage bin and boilers, as well as the supplement to the Safety Plan to address the radiological concerns of the boiler and smokestack areas. These documents were time-critical for continuing the asbestos abatement work within the building. The Site attorney contacted the PRP to request action on these issues.

ORC is in the process of placing a lien on this property.

Planned Removal Actions

Asbestos abatement operations have been suspended. The PRP's contractor provided EPA with a sampling plan for the coal storage bin and boilers, as well as the supplement to the Safety Plan to address the radiological concerns of the boiler and smokestack areas. These documents were reviewed by the OSC and subsequent comments were incorporated into the final draft by the contractor. Sampling operations are scheduled for 3/12/07 and full scale operations will restart on 3/19/07.

Next Steps

Continue the asbestos abatement work, investigate and determine if there are any areas of chemical contamination inside the building and subsequently address soil contamination issues outside the building.

Key Issues

The are no nationally significant or precedent-setting issues.

Disposition of Wastes

To date, 13 loads of Friable Asbestos totaling 520 cubic yards have been shipped to TRRF, 200 Bordentown Road, Tullytown, PA for secure landfill.

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