



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE – SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

ACTION MEMORANDUM

DATE: July 28, 2022

SUBJ: Request for a Removal Action at the J.B. Paper Company Site,
Pittsfield, Berkshire County, Massachusetts – **Action Memorandum**

FROM: Allyson Bowden, On-Scene Coordinator
Emergency Response and Removal Section II

THRU: William Lovely, Chief
Emergency Response and Removal Section II

Carol Tucker, Chief
Emergency Planning & Response Branch

TO: Bryan Olson, Director
Superfund and Emergency Management Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action at the J.B. Paper Company Site (the Site), which is located at 70 Elmvale Place in Pittsfield, Berkshire County, Massachusetts. Hazardous substances present in debris piles on the Site, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to pose a threat to human health and the environment. There are no nationally significant or precedent-setting issues associated with this Site, and there has been no use of the On-Scene Coordinator's (OSC's) \$200,000 warrant authority.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#: MAN000153497
SITE ID#: 01RH
CATEGORY: Time-Critical

A. Site Description

1. Removal site evaluation

On the evening of August 29, 2016, a large fire engulfed the vacant former mill building which most recently had been used as a wholesale distribution warehouse operated by the J.B. Paper Company.

In response to the fire and concerns about potential releases from the piles of remaining building debris, in December 2016, the City of Pittsfield hired an environmental consultant to conduct a hazardous materials site assessment. The assessment indicated the presence of suspect asbestos containing materials throughout the site and on the surface of the debris pile. In September 2021, the Massachusetts Department of Environmental Protection (MassDEP) collected a sample of air-cell pipe insulation which was found to contain 30% chrysotile. MassDEP referred the Site to the EPA Region 1 Emergency Planning and Response Branch on December 23, 2021.

EPA initiated a preliminary assessment and site investigation (PA/SI) on March 30, 2022. Fire debris, bricks and a single piece of pipe insulation was observed on-site, and the debris piles were in various stages of degradation, exposed to the elements, and unsecured from nearby residents and trespassers, who were seen on the property. A total of eight samples for asbestos analysis and 37 soil/debris samples (including two lab duplicates) for Resource Conservation and Recovery Act (RCRA 8) metals analysis were collected. In addition, a total of 22 samples (including one lab duplicate) were collected for PCB analysis. The RCRA 8 metals samples were field screened by an EPA Chemist in the EPA Mobile Laboratory. At the completion of the event, the samples were delivered to the EPA New England Regional Laboratory (NERL) for bulk asbestos, RCRA 8 metals, and PCB analysis. Analytical results from this sampling event indicate the presence of increased levels of lead and arsenic. PCB analysis came back non-detect and asbestos analysis indicated the one of eight bulk samples collected contained asbestos (refer to Table 1).

On June 21, 2022 and June 22, 2022, EPA, collected an additional 11 samples for asbestos analysis. An additional 58 debris samples (including five lab duplicates) were collected, and field screened on-site for RCRA 8 metals. The field screening indicates increased levels of lead and arsenic present within the debris pile. Both the asbestos and debris samples were delivered to EPA NERL upon completion of the sampling event. Analytical results from the bulk asbestos samples came back non-detect. Based upon the results from both sampling events (refer to Table 2) and the potential for further release of contaminated debris and material into the environment from the Site, a time-critical removal action was recommended in the Site Investigation Closure Memorandum dated July 27, 2022.

Table 1

Sample ID	Analysis	Compound	Matrix	Concentration %	Comments
ACM-08	Bulk Asbestos Analysis by PLM*	Chrysotile	Bulk	30	Air-Cell Pipe Insulation

*PLM – Polarized Light Microscopy

2. Physical location

The 4.2-acre Site is located at 70 Elmvale Place, in Pittsfield, Berkshire County, Massachusetts and is further defined by the Pittsfield Assessor's Office as Property ID G120002002 and by the Berkshire Middle District Registry of Deeds in a deed in Book 5721, Page 339. Its geographic coordinates from the approximate center of the property are:

Latitude: 42° 27' 58.5" North

Longitude: -71° 15' 19.7" West

The northeastern portion of the Site is bifurcated by a narrow public road, Elmvale Place and the Site is bordered to the west northwest by a factory outlet; to the northeast by Dower Square public housing; to the southeast by residential properties and a warehouse; and to the west by Pittsfield Cemetery. Onota Brook passes through the Site and feeds into the West Branch of the Housatonic River and potential and certified vernal pools are within a half mile of the Site.

3. Site characteristics

Before being used for 42 years as a wholesaler distribution warehouse, the Site had a long history of textile manufacturing. S.N. & C. Russell Manufacturing Company began its textile operations in 1843 and ceased in 1930; it re-opened for a short while in 1932 (although it is clear the Site was owned by Russell Manufacturing, the company operated multiple mills and it is unknown how long its operations included this Site during the company's existence). In 1916 and in 1920, two parcels were sold to the Kinney Worsted Yarn Company. Then in 1932, Site ownership transferred to Elmvale Dye Works and textile operations continued at the Site until Elmvale Dye Works and Elmvale Worsted Company ceased Pittsfield operations in February 1959. Textile Properties Trust took ownership of the Site on December 30, 1959, until September 29, 1967, during which it is unknown what, if any, use was made of the property.

Binder Realty Trust purchased the Site in September 1967 and Joseph Binder relocated his business, J.B. Paper Company, Inc., to the locale. The property remained in the Binder family and is now held by the Gerald Binder Revocable Trust. The J.B. Paper Company, operated by the

Binder family, was a wholesale distributor of paper products, sundries, cleaning supplies, toys, toiletries, etc. until 2009, after which the buildings were vacant.

According to the EPA Region I ArcGIS mapping tool, 10,603 people reside within 1 mile of the Site.

Based on information in EPA's EJSCREEN environmental justice screening tool, 0 out of 12 Environmental Justice Indexes for the area within a one-mile radius of the Site exceed the 80th percentile on a national basis.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

A combined total of 19 bulk asbestos samples and 95 soil/debris samples from multiple locations across the Site were collected in March 2022 and June 2022. Sampling analysis by EPA determined that one of the bulk asbestos samples contained 30% chrysotile asbestos (refer to Table 1). Sampling analysis also determined that lead and arsenic, both hazardous substances as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601(14), and 40 CFR § 302.4, have been released or threatened to be released into the environment at the former JB Paper Company property. EPA Removal Management Levels (RMLs) Cleanup Standards for Residential Areas are provided for comparison:

Table 2

	Lead in Soil (ppm)	Arsenic in Soil (ppm)
EPA RML - Residential	400	68
Range in Site Soil Concentration	ND-12,000	ND-360

5. NPL status

The Site is not currently on the National Priorities List and has not received a Hazardous Ranking System rating.

6. Maps, pictures and other graphic representations

See Appendix A for photolog.

B. Other Actions to Date

1. Previous actions

Response actions were conducted from 1994 to 1996 by Environmental Compliance Services on behalf of the J.B. Paper Company. During the removal of a #4 fuel oil underground storage tank, polychlorinated biphenyls (PCBs) were encountered at concentrations up to 16 parts per million (ppm). The source of the PCBs was not identified, but the report indicated they may have been present due to the property's historical industrial use since the 1800s. A Class B-1 Response Action Outcome Statement was submitted to MassDEP for the release of PCBs and excavation of #4 fuel oil contaminated soil was conducted under Release Tracking Number 1-00037, documented with a Response Action Outcome Statement.

On August 29, 2016, a conflagration destroyed the vacant J.B. Paper Company warehouse. After the fire, the city secured the property with fencing to prevent public access and demolished any walls that hadn't fallen in the blaze, leaving large debris piles of brick and metal. The city also notified MassDEP about the potential release of asbestos. Additionally, the city retained an environmental consultant, ATC Group Services, LLC (ATC) in 2016 to perform a hazardous materials assessment which included a limited visual assessment and sampling for the presence of asbestos-containing materials and an environmental review of the existing Site conditions for potential hazardous materials requiring special disposal and handling. The December 6, 2016 assessment report concluded that suspect asbestos containing materials were present throughout the Site and on the surface of the debris pile. MassDEP also performed surficial inspections of the debris pile in July 2016 and in the fall of 2021. Both the July 2016 and fall 2021 inspections confirmed the presence of suspect asbestos containing materials, however the other pipe insulation that was pictured in the ATC hazardous materials assessment report was not observed during the fall 2021 visit. A sample of air-cell pipe insulation collected by MassDEP on September 9, 2021 was found to contain 30% chrysotile.

2. Current actions

The PA/SI has been completed and there are no other ongoing EPA activities.

C. State and Local Authorities' Roles

1. State and local actions to date

As discussed in Section II.B.1 above, the City of Pittsfield retained an environmental consultant in December 2016. The results from this hazardous materials assessment indicated the presence of suspect asbestos containing material. During the September 2021 inspection, MassDEP collected a sample of air-cell pipe insulation from the debris pile for asbestos analysis. Analytical

results confirmed the presence of 30% chrysotile asbestos. On December 23, 2021, MassDEP referred the Site to EPA.

2. Potential for continued State/local response

MassDEP and the City of Pittsfield both lack the resources to undertake the removal action proposed in this Action Memorandum.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Site meet the general criteria¹ for a removal action, as set forth in 40 CFR §300.415(b)(1) in that “there is a threat to public health or welfare of the United States or the environment,” and in consideration of the factors set forth in 40 C.F.R. §300.415(b)(2) as described below.

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants; [§300.415(b)(2)(i)];

As has been stated previously in this memorandum, lead and arsenic have been detected in the debris piles on the Site. The lab results from most of the debris sampling indicate the presence of contaminants and hazardous substances at concentrations well exceeding EPA RMLs and MassDEP Standards. Additionally, asbestos containing material has been identified in the debris pile. Potential health effects are found in the Agency for Toxic Substances and Disease Registry’s Toxicological Profiles or ToxGuides.

Arsenic

Inhalation of inorganic arsenic may cause respiratory irritation, nausea, skin effects, and increased risk of lung cancer. Acute high dose oral exposure to inorganic arsenic may cause, nausea, vomiting, diarrhea, cardiovascular effects, and encephalopathy. Long term oral exposure to low levels of inorganic arsenic may cause dermal effects (such as hyperpigmentation and

¹ CERCLA section 104(a) authorizes removal responses “whenever (A) any hazardous substance is released or there is a substantial threat of such a release into the environment, or (B) there is a release or substantial threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare.” Note that EPA’s response authority is limited under section 104(a)(3) of CERCLA when there is a release or threat of release: of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found; from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures; or into public or private drinking water supplies due to deterioration of the system through ordinary use. EPA may not respond to these situations unless a public health or environmental emergency exists and no other authority can respond in a timely manner.

hyperkeratosis, corns, and warts) and peripheral neuropathy characterized by a numbness in the hands and feet that may progress to a painful “pins and needles” sensation. There may also be an increased risk of skin cancer, bladder cancer, and lung cancer.

Children who are exposed to high levels of arsenic exhibit symptoms similar to those seen in adults, including cardiovascular, dermal, and neurological effects, and vomiting following ingestion. There is some evidence that metabolism of inorganic arsenic in children is less efficient than in adults.²

Lead

The effects of lead are the same whether it enters the body through inhalation or ingestion. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increased in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High level exposure in men can damage the organs responsible for sperm production.

The Department of Health and Human Services has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and EPA has determined that lead is probably a human carcinogen. The International Agency for Research and Cancer has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.³

Asbestos

Exposure to asbestos occurs when the ACM is disturbed or damaged in some way to release particles and fibers into the air. Asbestos exposure can cause lung cancer; mesothelioma, a rare form of cancer that is found in the thin lining of the lung, chest and the abdomen and heart; and asbestosis, a serious progressive, long-term, non-cancer disease of the lungs⁴.

² Agency for Toxic Substances and Disease Registry (ATSDR), U.S. Department of Health and Human Services, Public Health Service, ToxGuide for Arsenic, October 2007.

³ Agency for Toxic Substances and Disease Registry (ATSDR), U.S. Department of Health and Human Services, Public Health Service, Toxicological Profile for Lead, August 2020.

⁴ Agency for Toxic Substances and Disease Registry (ATSDR), *Toxicological Profile for Asbestos*, September 2001

Actual or potential contamination of drinking water supplies or sensitive ecosystems [§300.415(b)(2)(ii)];

Onota Brook passes through the Site and feeds into the West Branch of the Housatonic River. Potential and certified vernal pools are within a half-mile of the Site. Runoff from the contaminated property could impact these surface waters.

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [§300.415(b)(2)(iv)];

The lead and arsenic contamination is widespread across the former J.B. Paper Company property. EPA sampling results found lead and arsenic in debris with concentrations as high as 12,000 ppm and 360 ppm, respectively, which exceed the EPA RMLs and MassDEP Standards for residential properties (refer to Table 2).

Asbestos containing materials (ACM), such as air-cell pipe insulation, was observed on the debris pile. The ACM is exposed to the elements and during high winds will likely migrate from the Site and onto the nearby residential and commercial properties. During the PA/SI, there was documented evidence of multiple trespassers walking through and living on the property. The Site is not completely secured by fencing and the materials are not secured, creating a risk of release to the public from trespassers and weather events.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [§300.415(b)(2)(v)];

As there is ACM and high levels of lead and arsenic in surface debris piles, the potential for migration is high. During times of heavy precipitation or snow-melt runoff, surface water will carry debris containing asbestos fibers, lead and arsenic. These particles will be redistributed and may reach neighboring residential properties. During extremely dry conditions, windblown dust or soil, also affixed with lead and arsenic particles and asbestos fibers, will be spread and redistributed. During these types of conditions, there is also a higher chance of inhalation of these particles and fibers.

The availability of other appropriate Federal or State response mechanisms to respond to the release [§300.415(b)(2)(vii)];

MassDEP has indicated that they currently do not possess the resources to abate this potential imminent hazard. Therefore, they are requesting assistance from the EPA to evaluate and dispose of the lead and arsenic containing Site soils.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances or pollutants or contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment. In accordance with OSWER Directive 9360.0-34 (August 19, 1993), an endangerment determination is made based on "appropriate Superfund policy or guidance, or on collaboration with a trained risk assessor," which is outlined and discussed in Section III above. "Appropriate sources include, but are not limited to, relevant action level or clean-up standards, Agency for Toxic Substances and Disease Registry documents or personnel, or staff toxicologists." In this case, EPA relied on the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP)⁵, for determining risk at the Site (refer to Table 1).

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Specific removal activities will include, but are not necessarily limited to the following;

- Conducting a site walk to determine the necessary removal action resources;
- Developing and implementing a site-specific safety plan;
- Mobilizing necessary resources (equipment and personnel) required to support activities described in this section, including securing work trailer(s), sanitary facilities, sub-surface utility search, and connecting utilities;
- Conducting additional sampling and site characterization to further delineate extent of contamination and/or assist in supporting response and disposal actions;
- Performing public communication and outreach activities;
- Providing security or security guard service, as needed;
- Inventorying and documenting existing property conditions prior to commencing excavation activities;
- Clearing vegetation or debris as needed to provide proper clearance and space for removal activities;
- Removing the stack on-site and disposing of contaminated portions as necessary;
- Removing any debris contaminated with lead and arsenic at concentrations of concern;
- Removing any ACM and ACM contaminated debris from the Site;

⁵ U.S. Environmental Protection Agency. <https://www.epa.gov/asbestos/overview-asbestos-national-emission-standards-hazardous-air-pollutants-neshap>

- Performing debris sampling during excavation to determine extent of contamination as necessary;
- Segregating contaminated debris from non-contaminated debris as appropriate;
- Excavating any surficial soil contaminated with lead and arsenic at concentrations of concern, as necessary;
- Conducting dust-control and air monitoring activities, as necessary, to prevent off-site migration of dust during removal activities;
- Performing surficial soil confirmation sampling and analysis in areas where debris was removed, as necessary;
- Providing for a temporary staging area for debris and soil while awaiting disposal;
- Removing all hazardous substances and disposing at an appropriately licensed off-site facility, in conjunction with EPA off-site rule, and
- Repairing or replacing response related damages, excluding reconstructing stack or other structures.

2. Community relations

EPA has assigned a Community Involvement Coordinator and will continue coordinating with MassDEP and the city to prepare outreach materials as necessary to inform the public of EPA activities as they progress.

3. Contribution to remedial performance

The cleanup proposed in this Action Memorandum is designed to mitigate the threats to human health and the environment posed by the Site. The actions taken would be consistent with and will not impede any future responses.

4. Description of innovative technologies and sustainable approaches

In accordance with the December 23, 2013 Memorandum, updated August 02, 2016, issued by Office of Land and Emergency Management as well as the Region 1 Clean and Greener Policy for Contaminated Sites, greener cleanup practices should be considered for all cleanup projects. Greener cleanup is the practice of incorporating practices that minimize the environmental impacts of cleanup actions and maximize environmental and human benefit. Alternative technologies and sustainable approaches will be considered and incorporated, as appropriate, throughout the implementation of the removal action.

5. Applicable or relevant and appropriate requirements (ARARs)

Federal ARARs:

Clean Water Act, National Pollutant Discharge Elimination System (NPDES), 40 C.F.R. Parts 122 – 125; 122.26: Establishes the specifications for discharging pollutants from any point source into the waters of the U.S. Also, includes storm water standards for construction sites over one acre. Removal activities will be managed to prevent stormwater discharge from the Site. To the extent water generated from the removal action needs to be discharged to Onota Brook, applicable discharge standards will be met.

Clean Water Act, 40 C.F.R. Sections 122.26(c)(ii)(C) and 122.44(k): NPDES regulations for storm water control and management.

Clean Air Act, 40 C.F.R. Part 61, 42 U.S.C. Section 112(b)(1): standards for controlling dust. The regulations establish emissions standards for 187 hazardous air pollutants. Standards set for dust and release sources. If the removal of contaminated soils generates regulated air pollutants, then measures will be implemented to meet these standards.

Clean Air Act, National Emission Standards for Hazardous Air Pollutants (NESHAPS: 40 C.F.R. § 61.151): Standards for inactive waste disposal sites that apply to asbestos mills and manufacturing and fabricating. NESHAPS standards for preventing air releases from inactive asbestos disposal sites, including cover standards, dust suppression, and land use controls.

Toxic Substances Control Act (Transport and Disposal of Asbestos Waste), 40 C.F.R. Subpart E, Appendix D: Provides standards for transport and disposal of materials that contain asbestos. Requires proper wetting and containerization. Asbestos will be managed in compliance with these standards.

State ARARs:

Massachusetts:

40 C.F.R. Parts 260-262 and 264 Resource Conservation and Recovery Act, Subtitle C-Hazardous Waste Identification and Listing Regulations; Generator and Handler Requirements, Closure and Post-Closure - Massachusetts has been delegated the authority to administer these RCRA standards through its state hazardous waste management regulations. Waste generated will be tested to determine whether it exceeds hazardous waste thresholds and, if so, the hazardous waste will be managed on-site and until such time as it is shipped to an EPA-approved off-site disposal location.

The OSC will coordinate with State officials to identify additional State ARARs, if any. In accordance with the National Contingency Plan and EPA Guidance Documents, the OSC will determine the applicability and practicability of complying with each ARAR that is identified in a timely manner.

6. Project schedule

The duration of this removal action shall be approximately eight weeks from the day of EPA's contractor mobilizes to the Site.

B. Estimated Costs

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$400,000.00
Interagency Agreement		\$ 0.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$150,000.00
Extramural Subtotal		\$550,000.00
Extramural Contingency	10%	\$55,000.00
TOTAL, REMOVAL ACTION CEILING		\$605,000.00

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

A delayed removal action or the absence of a removal action described herein will cause Site conditions to remain unaddressed. This will result in the continued release or threat of release of hazardous substances into the environment, which pose a threat to human health and the environment.

VII. OUTSTANDING POLICY ISSUES

There are no precedent-setting policy issues associated with this Site.

VIII. ENFORCEMENT ... For Internal Distribution Only

See attached Confidential Enforcement Strategy.

The total EPA costs for this removal action that will be eligible for cost recovery are estimated to be \$605,000 (extramural costs) + \$100,000 (EPA intramural costs) = \$705,000 X 1.4009 (regional indirect rate) = **\$987,635**⁶.

IX. RECOMMENDATION

This decision document represents the selected removal action for the J.B. Paper Company Site in Pittsfield, MA, developed in accordance with CERCLA, as amended, and is not inconsistent with the National Contingency Plan. The basis for this decision will be documented in the administrative record to be established for the Site.

Conditions at the Site meet the NCP Section 300.415 (b) (2) criteria for a removal action due to the following:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants [§300.415(b)(2)(i)];

Actual or potential contamination of drinking water supplies or sensitive ecosystems [§300.415(b)(2)(ii)];

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [§300.415(b)(2)(iv)];

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [§300.415(b)(2)(v)]; and

The availability of other appropriate Federal or State response mechanisms to respond to the release [§300.415(b)(2)(vii)].

⁶Direct Costs include direct extramural costs \$605,000 and direct intramural costs \$100,000. Indirect costs are calculated by using regional indirect rate in effect at time cost estimate is prepared and is expressed as a percentage of the direct costs, 40.09% (effective February 8, 2022) x \$987,635, consistent with EPA's full cost accounting methodology. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

I recommend that you approve the proposed removal action. The total extramural removal action project ceiling if approved will be \$605,000.

APPROVAL:_____

DATE:_____

Appendix A



March 2022 – Stack, debris piles and covered piece of asbestos containing material



March 2022 – Debris pile with bricks and various building material



March 2022 – Air-cell pipe insulation confirmed to have 30% chrysotile asbestos