



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 13 2012

ACTION MEMORANDUM

SUBJECT: Request for a Ceiling Increase and Change of Scope for a Time-Critical Removal Action at the Liberty Fibers Site, Morristown, Hamblen County, Tennessee

FROM: Franklin E. Hill, Director
Superfund Division

THRU: Lawrence M. Stanton, Director
Office of Emergency Management

ATTN: Gilberto Irizzary, Director
Program Operations and Coordination Division

TO: Mathy Stanislaus, Assistant Administrator
Office of Solid Waste and Emergency Response

SITE ID #: B457

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of a Ceiling Increase and Change of Scope for the Liberty Fibers Site (Site) Removal Action located in Morristown, Hamblen County, Tennessee. The Site continues to pose a threat to public health or welfare or the environment that meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.415(b) criteria for removal actions and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(c) emergency exemption from the \$2 million and twelve-month statutory limitations. Removal activities were commenced under a \$250,000 Emergency Action Memorandum signed April 21, 2010. Additional funding is required in order to complete removal of deteriorated Thermal System Insulation (TSI), Asbestos-Contaminated Material (ACM), and containers of hazardous waste and other hazardous substances or pollutants or contaminants at the Site in order to mitigate the threats to human health, welfare, and the environment.

The Removal Action is a Nationally Significant or Precedent Setting Removal Action. Concurrence was received from the Office of Emergency Management on June 23, 2011 (Attachment A). If approved, this ceiling increase will bring the total project ceiling to \$11,646,770 of which \$9,802,695 will be funded through the Regional Removal Allowance.

II. SITE CONDITIONS AND BACKGROUND INFORMATION

CERCLIS ID: TNN000410507
Removal Category: Time-Critical Removal Action

A. Site Description

1. Removal Site Evaluation

A multimedia inspection was conducted on March 20 - 21, 2008, and documented in letter report from Tetra Tech dated June 8, 2008. The EPA inspected the Site on December 3 - 4, 2009, to gather information for a later sampling event. A letter report from Tetra Tech dated January 18, 2011, documents this reconnaissance inspection. A Removal Site Evaluation (RSE) was conducted January 18 - 22, 2010, and documented in a letter report from Tetra Tech dated January 17, 2011. The presence of friable asbestos was identified and documented in several demolition and debris piles throughout the Site. The types of asbestos identified included chrysotile, amosite, and anthophyllite, which were also identified in a September 17, 2008, report of an asbestos survey conducted by the potentially responsible party (PRP) contractor ACT Services, LLC (ACT). Asbestos was identified at maximum detections of 60% chrysotile, 50% amosite, 40% anthophyllite, and 30% actinolite. The majority of the bulk material sampled was described as damaged or weathered. ACT also performed an asbestos survey on the Power House, report dated August 11, 2008. Asbestos was identified at maximum detections of 55% chrysotile and 45% amosite. Based on the consultant's report for the PRP and the EPA's site visit and sampling events in March 2008, December 2009 and January 2010, the EPA determined that friable and weathered ACM and TSI are widely dispersed across the Site.

2. Physical Location

The Site is located at 4901 Enka Highway (State Route 160), Morristown, Tennessee at Latitude 36° 9' 17.53" N and Longitude -83° 12' 23.30" W. The Site is located on a 230-acre parcel on the northern end of the former American Enka/BASF Corporation textile facility in the community of Lowland located south of Morristown, Tennessee. The facility began manufacturing rayon for the textile industry in 1947. American Enka was purchased by BASF in 1985. In 1992, BASF sold the facility to Lenzing AG (d.b.a. Lenzing Fibers Corporation) which eventually transferred manufacturing to Liberty Fibers Corporation. Land use of the surrounding area is primarily industrial and agricultural with a few residential properties located across a Norfolk Southern railroad line that borders the northern fence line of the former rayon plant. The surrounding area is classified Low Income and Non-Environmental Justice (EJ) Area from the map of potential EJ areas generated by the Office of Environmental Accountability on August 7, 2012. Landfills, previously operated by BASF and Lenzing Fibers are immediately east of the Site. A railroad spur enters from the northern gate of the Site. The Nolichucky River is approximately one-quarter mile south of the Site and flows to the French Broad River.

3. Site Characteristics

Following the Liberty Fibers bankruptcy, the land was sold in an auction to Lowland Industrial Complex, Inc., and operated primarily as a recycling company. A&E Salvage, Inc., was awarded salvage rights to the property. Several intact structures on-site were demolished and scrap metal was salvaged from the demolition. The most significant structure is a 10-story coal fired power plant that is partially demolished with two 200-foot smoke stacks (Figures 1a and 1b). The former Liberty Fibers facility contains several partially demolished buildings (Figures 1c and 1d), and approximately 80 acres of asbestos-contaminated property with an estimated volume of 70,000 cubic yards of demolition debris contaminated with friable asbestos. There are over 60,000 linear feet of TSI pipe throughout the Site.



Figure 1a
Power House looking north

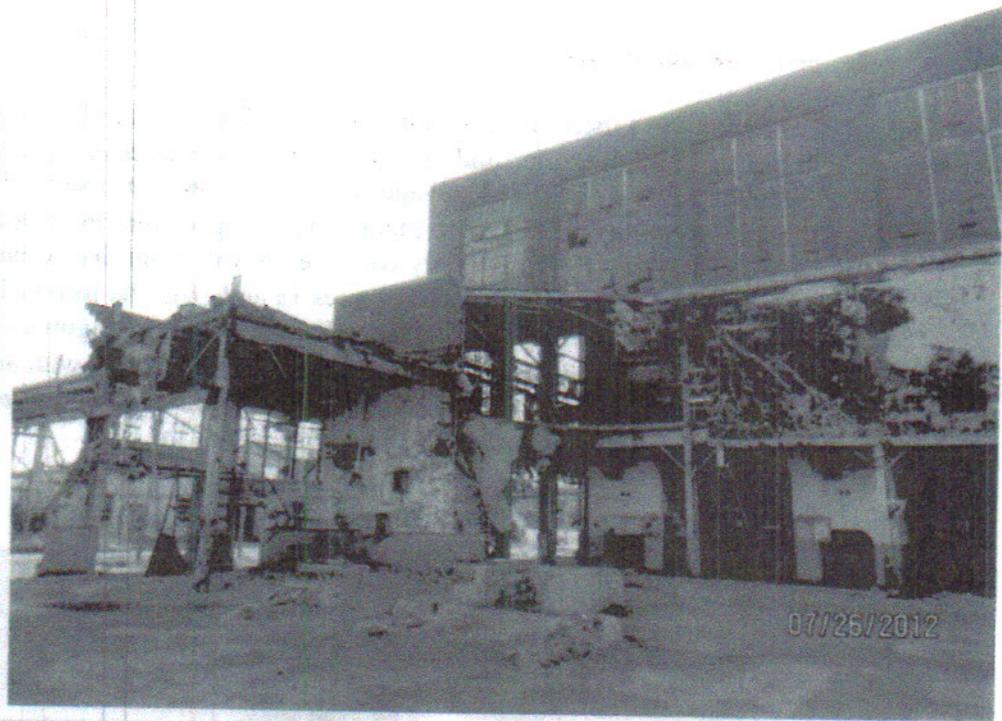


Figure 1b
Power House looking northeast

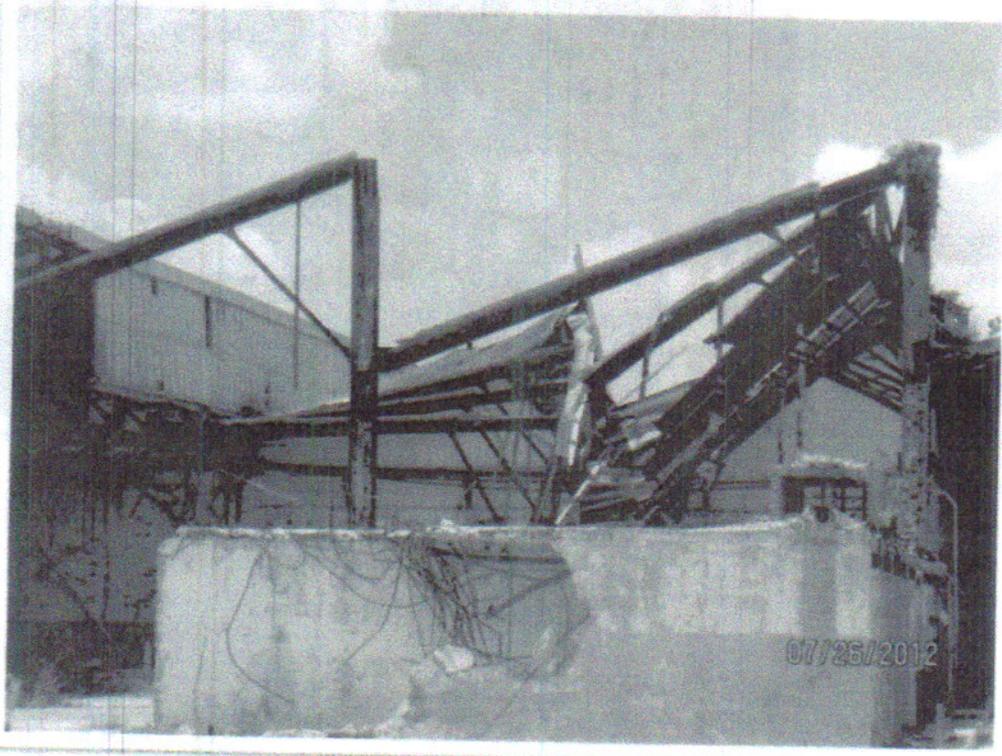


Figure 1c
Rayon Filament Warehouse looking east



Figure 1d
Rayon Filament Warehouse looking southeast

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

Asbestos is a hazardous substance as defined by section 101 (14) of the CERCLA. The majority of friable asbestos is located near the former Power House, the Rayon Filament warehouse and in basements of the former structures on the Site. The total volume of friable asbestos and ACM is estimated at 70,000 cubic yards over 80 acres of former building foundations and impacted soil.

There are totes, drums, cylinders, and other containers containing hydrofluoric acid, acetic acid, phosphoric acid, butyl alcohol, xylene, chlorodifluoromethane, acetylene, ammonium hydroxide, tetrahydrofuran, cyclohexanone, methyl ethyl ketone, sodium hydroxide, ethylene oxide, acetaldehyde, TSCA listed esters, potassium hydroxide, D001 oxidizer, hexavalent chromium, lead chromate, glycol ethers, and polymeric diphenylmethanediisocyanate (MDI). All of these are hazardous substances as defined by section 101 (14) of CERCLA. The containers are in various stages of deterioration and pose a threat of release.

5. NPL Status

This Site is not currently on the National Priorities List (NPL). The EPA's Site Evaluation Program does not believe the Site will score high enough through the Hazard Ranking System to list the Site on the NPL.

6. Maps, pictures and other graphical representations

Maps, pictures and other graphics are available upon request.

B. Other Actions to Date

On June 30, 2011, the EPA approved a Ceiling Increase and Exemption from the Twelve-Month and \$2 Million Statutory Limitations Action Memorandum (Attachment B). In August 15, 2011, the EPA started the Time-Critical Removal Action and began construction of a Class III landfill on-site. The EPA began disposing of ACM in the landfill on January 14, 2012. An additional Ceiling Increase and Change in Scope Action Memorandum was approved on March 19, 2012 (See Attachment C). From March 19, 2012, to current operations, the EPA has hauled over 15,000 cubic yards of ACM and over 3,700 cubic yards of asbestos insulation to the on-site landfill and over 14,000 cubic yards of ACM to on-site basements, discovered 154 drums, 9 totes, 13 cylinders, and 55 buckets of hazardous substances, pollutants or contaminants located throughout the Site, and delineated over 60,000 feet of TSI on overhead piping that must be removed. Two partially demolished buildings on-site are being condemned and are a source of uncontrollable asbestos releases.

C. State and Local Authorities' Roles

1. State and local actions to date

No new actions.

2. Potential for continued State/local response

TDEC does not have sufficient funds to conduct necessary response measures in a time-critical manner. The EPA will continue to coordinate activities with TDEC.

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

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i, iii, iv, v, and vii) directly apply to the Site:

- a. *300.415(b)(2)(i): Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.*

The exposure risk remains as documented in the June 30, 2011, Action Memorandum. On March 9, 2012, Bob Safay with the Agency for Toxic Substances and Disease Registry (ATSDR) made a site inspection and noted verbally that the remaining two-thirds of the former BASF/Lowland Industrial Complex and a commercial landfill operated by Tidi Waste, located immediately adjacent to the east and south of the Site, are occupied by businesses and are at risk to exposure. The ATSDR Toxicological Profile for Asbestos, September 2001, supports his statement. In a memorandum from Tim Frederick of the Technical Services Section to Perry

Gaughan, On-Scene Coordinator (OSC), dated April 22, 2010, he concludes the asbestos air sample collected from next to the Power House, 0.02 fibers/cc, confirms the potential for asbestos to become airborne. The disease and pathology associated with the inhalation of asbestos fibers is well documented in the medical literature. Congress has found that "*medical science has established that no minimal exposure to asbestos fibers which is considered safe to exposed persons.*" (20 U.S.C. § 3601(a)(3)).

- b. 300.415(b)(2)(iii): Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that pose a threat of releases.**

During the course of the Removal Action, abandoned totes, drums, cylinders, and other containers of hazardous substances, pollutants or contaminants have been discovered. Many of these containers are in poor condition and pose a threat of release. Of particular concern are three unidentified bulging drums and a drum containing hydrofluoric acid that is leaking around the bungs.

- c. 300.415 (b)(2)(iv): High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate**

Analytical results reveal the presence of friable asbestos in the surface soil and within the demolition debris piles on the Site. There is no natural or man-made barrier to restrict asbestos that is comingled with the debris from migrating off-site. There is over 60,000 linear feet of TSI pipe running throughout the Site, most of which is in poor condition. Future land-use of the Site may result in vigorous and routine disturbances of the soil and structural remnants of the former buildings. An action is warranted to prevent exposure to workers who will be operating at or near the area of contamination, and future tenants of the Site.

- d. 300.415 (b)(2)(v): Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released**

Wind and dry weather conditions make the asbestos in the debris piles susceptible to becoming airborne. The 811 LE Lockdown Encapsulant® that was applied during the Emergency Response is not an effective long-term control measure. Precipitation may also carry fibers off-site. Mike Goble, U.S Bureau of Reclamation, came to these same conclusions in his Travel Report dated March 28, 2012.

- e. 300.415 (b)(2)(vii): The availability of other appropriate Federal or State response mechanisms to respond to the release**

At this time, there are no state or local government mechanisms that are able to respond to this incident with the resources needed to perform the necessary removal actions.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances and/or pollutants 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 or welfare, or the environment.

V. EXEMPTIONS FROM STATUTORY LIMITS

Site conditions continue to meet the exemption criteria specified in the original Ceiling Increase and Exemption from the Twelve-Month and \$2 Million Statutory Limitations Action Memorandum dated June 30, 2011.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Response Actions

1. Action Description

The additional funding requested in this Action Memorandum will support response actions to complete disposal of the remaining ACM debris into the on-site landfill and decontaminate the established hot-zone as well as change the scope of the previously approved Action Memorandum to include disposal of containers of hazardous substances, pollutants, or contaminants discovered on-site and to remove and dispose of the remaining TSI. The new scope of work will include the following actions:

- a. Consolidation of remaining friable asbestos and demolition debris contaminated with friable asbestos, including the ACM debris contained in the basements, into the on-site landfill;
- b. Demolition of unsafe and condemned structures;
- c. Removal of overhead pipe wrapped in TSI;
- d. Capping and seeding the on-site landfill and preparation of as-built drawings;
- e. Rendering the reservoir incapable of accumulating enough rainfall and runoff to require a dam permit;
- f. Sampling and disposal of containers of hazardous substances, pollutants, or contaminants;
- g. Air monitoring measures and decontamination protocols necessary on all asbestos abatements;
- h. Restoration of areas disturbed by the removal action to their pre-removal state to the extent practicable;
- i. Providing Site security during non-working hours;
- j. Refer Site control back to TDEC following completion of the removal action.

2. Contribution to remedial performance

The response actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action at the Site.

3. Engineering Evaluation and Cost Analysis (EE/CA)

This removal action is time-critical and does not require an EE/CA.

4. Applicable or Relevant Appropriate Requirements (ARARs)

In accordance with the NCP at 40 C.F.R. § 300.415(j), on-site removal actions conducted under the CERCLA are required to attain applicable or relevant and appropriate requirements (ARARs) to the extent practicable considering the exigencies of the situation or provide grounds for invoking a CERCLA waiver under Section 121(d)(4). In determining whether compliance with ARARs is practicable; the lead agency may consider appropriate factors, including (1) the urgency of the situation; and (2) scope of the removal action to be conducted. Additionally, under 40 C.F.R. 300.405(g)(3), other advisories, criteria, or guidance may also be considered (so-called To-Be-Considered or TBC) when conducting the removal action. The site-specific ARARs and TBC for this time-critical removal action are as follows:

Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAP) apply and the June 8, 2012, memorandum from Bob Perciasepe, Deputy Administrator of EPA, regarding notification of rules and regulations regarding the demolition of asbestos-containing structures will be followed.

The Migratory Bird Treaty Act may also apply to removal action performed on the Power House due to current nesting.

TDEC Solid Waste Processing and Disposal regulations, Chapter 1200-01-07, apply to the Class III landfill constructed on-site.

As provided in CERCLA Section 121(d)(3) and the Off-site Rule at 40 C.F.R. 300.440 *et seq.* the off-site transfer of any hazardous substance, pollutant, or contaminant generated during the response action will be sent to a treatment, storage or disposal facility that is in compliance with applicable federal and state laws and has been approved by the EPA for acceptance of CERCLA waste.

A request for identification of State ARARs was sent to TDEC on August 27, 2012. No response has been received to date.

5. Project Schedule

Response actions necessary to mitigate the threats posed by the Site, foregoing any unexpected delays, should be completed within approximately eight (8) months.

B. Estimated Costs

	Current Ceiling	Proposed Increase	Proposed Ceiling
<u>Extramural Costs:</u>			
<u>Regional Allowance Costs:</u>			
ERRS	\$5,102,195	\$4,700,500	\$9,802,695
<u>Non-Regional Allowance Costs:</u>			
START	\$470,000	\$300,000	\$770,000
ERT/REAC	\$0	\$100,000	\$100,000
Bureau of Reclamation	\$40,000	\$60,000	\$100,000
<u>Subtotal, Extramural Costs:</u>	\$5,612,195	\$5,160,500	\$10,772,695
15% Contingency:	\$100,000	\$774,075	\$874,075
TOTAL, REMOVAL ACTION PROJECT CEILING:	\$5,712,195	\$5,934,575	\$11,646,770

Note: CERCLA Section 104(b) investigatory costs are not included in the estimate because they do not count against the removal action project ceiling.

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

Actual or threatened releases of friable asbestos and other hazardous substances from this Site, if not addressed by the response action selected in this Action Memorandum, pose an imminent and substantial endangerment to public health or welfare, or the environment. Delayed action will prolong exposure and increase the potential for new exposures.

VIII. OUTSTANDING POLICY ISSUES

The proposed Removal Action is a nationally significant or precedent setting Removal Action because friable asbestos is the principle contaminant of concern. Concurrence from the Office of Emergency Management was received on June 23, 2011.

IX. ENFORCEMENT

Enforcement activities are ongoing. An updated Enforcement Addendum is enclosed. It is expected that this Site will continue as a fund-lead removal action.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$16,841,362 using the following formula:

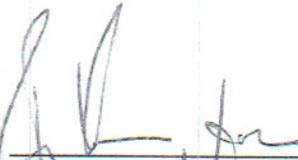
(Total Extramural Costs + Total Intramural Costs) + (40.97% x (Total Extramural Costs + Total Intramural Costs)) or (\$11,646,770) + (\$300,000) + (40.97% x (\$11,946,770)) = \$16,841,362¹.

X. RECOMMENDATION

This decision document represents the selected removal action for the Liberty Fibers Site in Morristown, Hamblen County, Tennessee developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site continue to meet the NCP Section 300.415(b) criteria for a removal action and the CERCLA Section 104(c) emergency exemption from the \$2 million and twelve-month statutory limitations. I recommend your approval of the proposed project ceiling increase and change in scope to continue the removal response. The total project ceiling, if approved, will be \$11,646,770 of which an estimated \$9,802,695 comes from the Regional Removal Allowance.

APPROVED: _____


Mathy Stanislaus, Assistant Administrator
Office of Solid Waste and Emergency Response

Date: _____

9/26/2012

DISAPPROVED: _____

Mathy Stanislaus, Assistant Administrator
Office of Solid Waste and Emergency Response

Date: _____

Attachments:

- Enforcement Addendum
- Concurrence Memorandum (June 23, 2011)
- Request for a Ceiling Increase and Exemption from the Twelve-Month Statutory Limit and \$2 Million Exemption for a Time-Critical Removal Action (June 30, 2011)
- Request for Ceiling Increase and Change in Scope (March 19, 2012)

¹Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. 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.