UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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BOSTON, MA 02109-3912

CONTAINS ENFORCEMENT-SENSITIVE INFORMATION

MEMORANDUM

DATE: July 26, 2013

SUBJ: Request for a (second) Removal Action at the Vermont Asbestos Group Mine Site, Eden and Lowell, Orleans and Lamoille Counties - **Action Memorandum**

FROM: Gary Lipson, On-Scene Coordinator
Emergency Response and Removal Section II

THRU: Steven R. Novick, Chief
Emergency Response and Removal Section II

Stanley Chin, Acting Chief SDC
Emergency Planning & Response Branch

TO: James T. Owens III, Director
Office of Site Remediation and Restoration

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action at the Vermont Asbestos Group Mine Site, (the site), which is located off of Mines Road in Eden and Lowell, Orleans and Lamoille Counties, Vermont. This will be the second removal action conducted by US EPA at this site. Historically milled/refined and extremely friable asbestos present in a dilapidated on-site storage building, 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. To date, there has been no use of the OSC's $200,000 warrant authority.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# : VTN000105222
SITE ID# : 01ED
CATEGORY : Time Critical

A. Site Description

1. Removal site evaluation

Mining of chrysotile asbestos began at the Vermont Asbestos Group (VAG) Mine on the side of Mount Belvidere in Eden, Vermont in the late 1800's and after numerous owners and operators, the gates were closed in 1993. The owner/operator at that time, the Vermont Asbestos Group, Inc. (VAG), used its available resources in an attempt to properly close the site and to keep the asbestos laden tailings and sediment from migrating off-site. Due to two large and steep tailings piles, extreme weather events, and numerous pathways leading off-site, the tailings and sediment began impacting the surrounding area and two distinct watersheds. During the Summer and Fall of 2007 and the Spring of 2008, EPA conducted a fund-lead, time critical Removal Action at this site. Actions included the construction of water-bars, diversion trenches, berms, and culverts to keep contaminated runoff from reaching the off-site water bodies. The runoff was either diverted to enter the waterways downstream of the tailings piles or if contaminated, directed into on-site areas where deposition of the sediment/fibers was allowed to occur prior to the flow leaving the site. Under an informal agreement with Vermont, VAG has been using its limited resources to maintain the site engineered controls (e.g. excavate trapped sediment from retention basins and deposit that sediment in on-site locations where it will no longer be subject to off-site migration) in attempts to extend their lifetime.

Along with the tailings piles and other mine features, there are a number of on-site buildings that were not part of the prior removal action. These buildings were used for storage of milled product, sorting and bagging of product for different uses, and housing of mining related equipment. One of these former storage structures that contains approximately 18,000 cubic yards of crushed dry ore is beginning to fail and is threatening to release the contents to the environment. When the mine was operating, this dry ore that went through a series of crushers and then dried, would have been transported from this storage building via a conveyer belt to an adjacent building where the fibers would be separated from the ore and sorted according to size and intended usage. The particle size of this dry ore ranges primarily from fines to sand and one sample collected from this material had an asbestos concentration of 45%. The aluminum roof of the storage building is beginning to peel and is exposing the contents to precipitation. The dry ore is absorbing the moisture, swelling, and beginning to stress the building structure. The potential release to the environment is evidenced by the stressed end of the structure and cracking/separating of the transite siding which serves as the building shell. Demolition of the structure while safely moving the product and building debris to a secure on-site location is required.

2. Physical location

The site is located in a rural area off Mines Road in the towns of Eden and Lowell, VT, within Orleans and Lamoille Counties. The oldest part of the mine, the Eden Quarry and its associated tailings pile, is located on the southern/southeastern face of Belvidere Mountain. The larger of the tailings piles is associated with the Lowell Quarry and is

located on the lower, eastern slope of the mountain. The entire property is greater than 1,500 acres and the tailings piles, open pits and quarries, and waste rock make up greater than one third of that amount. The building in question is within three hundred yards of the main entrance where the approximate latitude and longitude is N44°45.9', W72°31.2'.

3. Site characteristics

Between the late 1800's and 1993 (when production operations ceased), asbestos ore was mined out of three locations on Belvidere Mountain in areas identified as Eden Quarry, C-Area, and Lowell Quarry. The currently inactive mine previously removed chrysotile asbestos from open cuts, and as a result, produced large amounts of waste rock and tailings.

The waste pile associated with the Eden Quarry is estimated at greater than 5 million tons, while the Lowell Quarry and the C-Area, which produced the most abundant type of ore (highest concentration of chrysotile asbestos), created the largest of the waste piles, estimated at 25 million tons and covering 80 acres.

The piles are being heavily eroded by natural forces and are contributing asbestos-laden runoff to both the Lamoille and Mississquoi watersheds. A wetland, approximately 25 acres in size is located approximately one mile down-gradient of the waste pile and has been heavily affected by the tailings. The wetland area appears to be reaching its holding capacity for tailings and may adversely affect downstream water bodies.

The main entrance to the former mine area is gated, and as there is high recreational activity in the vicinity (including hunting, fishing, all-terrain vehicle riding and hiking), boulders, concrete jersey barriers, and warning signs have been placed on a number of logging roads and trails leading into the site. However, access to the site can be gained at numerous locations throughout the woods and there is constant evidence of trespassers on the site.

Out of the remaining on-site structures, there are two that may present future problems. Once the rock was dynamited or otherwise removed from the quarries, it was then broken up within the crusher building(s), where asbestos fibers were released and conveyed to the dry ore storage building, the subject of this action memorandum. The crusher building(s) has already been reinforced in some areas to prevent further deterioration and contains smaller amounts of potentially friable asbestos. The second structure in question is the seven-story mill building where the dry ore was sent for final sifting and sorting. This is also where the final product was sized and placed into bags for off-site shipment. The building contains mostly mechanical equipment and appears to be structurally intact, although the roof and siding are deteriorating and will need ongoing attention. There has already been some reinforcement and/or repair of broken windows, doors, and peeling siding. This building contains bags of fine and friable product, small piles of asbestos, asbestos-laden dust, and filter socks which were used to size the product. Neither of these structures are posing immediate threats and have not been identified by the state as requiring demolition or extensive repair at this time. It is expected that ongoing

maintenance of these structures will be funded by a Trust set up by a 2009 Consent Decree crafted by US EPA, the State of Vermont, and US DOJ representatives after the previous US EPA removal action. See Section II.B.1. of this memorandum for additional CD details.

According to the EPA EJ Screen, the site is potentially in a low income environmental justice area.

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

As previously stated in this Action Memorandum, there are approximately 18,000 cubic yards of friable asbestos (CERCLA hazardous substance (40 CFR 302.4)) stored within a compromised barn-type structure on the VAG Mine property. Due to the mine being shut down in 1993, the lack of maintenance on the buildings prior to the 2009 CD, and coupled with severe weather conditions in northern Vermont, the structure is losing its integrity with portions of the roof peeling and cracks forming in the exterior walls. Precipitation is entering the building, which is swelling the product and increasing its volume to a point where it is exceeding the volume of the structure and forcing exterior walls outward. One end of the building has already been shored up with plywood sheeting, but the asbestos product is beginning to seep out under the plywood and out through the recently formed cracks on the other end. Sample analysis of product collected from the interior of the building has documented 45% chrysotile asbestos.

5. NPL status

The site has been preliminarily evaluated by the Superfund Site Assessment program, but has not been listed on the NPL. It is eligible for NPL consideration, but local voting within the two affected towns of Eden and Lowell in March 2012 overwhelmingly indicated that the towns did not favor inclusion on the NPL. In Vermont, the governor will not request a listing unless there is local support. It is unknown at this time if the listing will be revisited by the local communities as site conditions continue to degrade.

B. Other Actions to Date

1. Previous actions

In 1986, when the mine was still operational, it was subject to standard inspections for compliance with National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations. Samples were collected and analyzed at the EPA New England Regional Laboratory (NERL), but due to the time period of the sampling event and the lack of any follow-up, the results are no longer on file .

Additionally in 1986, representatives from the US EPA Removal Program and the Agency for Toxic Substance and Disease Registry (ATSDR) visited the site for a limited removal

assessment. ATSDR determined that an off-site health threat from airborne asbestos did not exist due to the small number of potential receptors.

On November 2 and 3, 2006, representatives from the US EPA removal program and ATSDR participated in a site visit and meeting with representatives of VAG, their consultant, and Vermont state agencies. The on-site waste piles, the gully erosion being formed through the piles by precipitation and tributaries to Hutchins and Burgess Brooks, and some of the off-site areas being heavily impacted were part of the site visit. The parties discussed potential actions to mitigate the off-site migration of the tailings material. EPA was not asked to provide additional assistance at that time.

In a letter dated July 30, 2007, the Secretary of the Vermont Agency of Natural Resources (ANR) specifically requested US EPA assistance. US EPA Removal Program representatives visited the Site again on August 29 and 30, 2007. US EPA, along with VT DEC (a department within ANR) Officials, inspected previously constructed water diversion trenches and areas of the Site that were being impacted by precipitation and drainage pathways. VT DEC pointed out areas that they felt needed immediate attention to prevent additional contamination from reaching the off-site water bodies.

In October 2007, US EPA and their contractors mobilized to the site. After receiving site-specific asbestos awareness training as required by the state, the crew worked on-site until demobilizing for the winter on November 20, 2007. Completed actions included the clearing of a clean support zone prior to the construction of deposition basins, water-bars, diversion trenches, and berms to keep contaminated runoff from reaching the off-site water bodies. These features were engineered to divert 'clean' runoff from entering the waterways downstream of the tailings piles. Contaminated runoff was diverted into on-site sedimentation ponds where deposition of the sediment/fibers can occur prior to the flow leaving the site.

On June 9, 2008, US EPA re-mobilized to the site to complete its objectives of diverting contaminated runoff water from migrating off the property. Features completed the previous Fall were inspected and reworked to accept additional flow and sediment. These actions were necessary due to extremely heavy precipitation and associated runoff. In addition, new berms and trenches were constructed around the Eden Quarry's tailing pile. These structures were designed to carry runoff beyond the pile and reconnect to Hutchins Brook, maintaining the hydrologic flow to down-gradient wetlands.

In 2007, G-1 Holdings, Inc. (G-1, successor to a past owner/operator), was sent a Notice of Responsibility (NOR) letter by US EPA, inviting them to participate in upcoming removal actions. G-1's predecessors' `mined and milled asbestos laden rock from 1936 through 1975. Due to the company's ongoing exit from bankruptcy status and other complicating issues, US EPA asked the US Department of Justice (DOJ) to participate in settlement negotiations. US EPA, the State of Vermont, and US DOJ representatives worked to craft a Consent decree (CD) with G-1, allocating funds for immediate site action (injunctive relief activities such as: air monitoring, site security, and site maintenance) for a seven year

period. The CD also provided for future funding/reimbursement from G-1 to address long-term concerns, freeing up limited state and federal funds. A Trust was formed and a Trustee was appointed to oversee the funding for the injunctive relief items required by the CD. US EPA and the state have been working with the Trustee since that time to ensure that the funds are being properly allocated and any immediate site issues are addressed in a timely fashion.

2. Current actions

As discussed in the previous Section, II.B.1., Previous Actions, US EPA and the state have been working with the G-1 Holdings Trustee to ensure that funding allocated by the CD has and is currently being used appropriately at the Site to address immediate concerns. This includes an active air monitoring program, erosion issues, building deterioration and maintenance, and access and security concerns.

US EPA and the state have been negotiating an Ability-to-Pay Cost Recovery Consent Decree with VAG, Inc. that is in the process of final review.

C. State and Local Authorities' Roles

1. State and local actions to date

In 2004, VT ANR began investigating the site when it became apparent that the mine tailings were migrating off-site. In May and August of 2006, representatives of the VT DEC Water Quality Division conducted biological and chemical assessments of eleven locations within the two affected watersheds. Their summary report stated: "The preliminary data collected provide evidence linking the tailings piles within the Hutchins Brook and Burgess Branch watersheds both directly and indirectly to chemical and physical biological stressors identified during this assessment. Elevated levels of chrysotile-fibers and associated metals in the water column and sediment, absence of canopy cover and the resulting poor macroinvertebrate community assessment at Hutchins Brook 2.1 & 2.8, Hutchins Brook Tailing Tributary, and Burgess Tributary 10 & 11 are likely the result of the tailing piles eroding asbestos materials into adjacent waterways."

As part of an effort to establish a protocol for conducting environmental sampling at mine sites nationwide, the US Geological Survey (USGS) with assistance from the VT DEC, collected a number of on-site tailing pile samples and off-site water samples for mineralogy, metals, and leaching analysis during the summer of 2007. In addition, the VT DEC also collected additional sediment and water samples for analysis, downstream from the previous studies they conducted in 2005.

During the 2007 – 2008 US EPA removal action, a number of site mitigation features (retention basins, water bars, diversion trenches, berms, and culverts) were constructed to keep contaminated runoff from reaching the off-site water bodies. Erosion of the large tailings piles continues to transport asbestos laden sediment into, on top of, and through

those features. To prevent the erosion from rendering the features irrelevant, the property owner (VAG) has been maintaining those features by removing the sediment with heavy machinery and moving it to other on-site locations where it is not subject to off-transport. The VT DEC has been overseeing this work to ensure that the proper locations are addressed and the work is performed in a safe and efficient manner.

In addition, and as discussed in Section II.B.1 above, there are on-going tasks associated with the current CD which is funded by the G-1 Holdings Trust. These tasks include conventional maintenance of: access roads to the air monitoring and meteorological stations, the on-site buildings which house ore in various stages of refinement, and perimeter security issues such as signage and fencing. The VT DEC has been crucial in identifying and overseeing this work.

2. Potential for continued State/local response

VT DEC is and will continue to work with VAG, the current property owner, and the G-1 Holdings Trustee to oversee the injunctive relief activities as described earlier. The state, however, has limited funding and has historically been limited to oversight activities.

VT DEC is currently engaging a contractor to locate and scan on-site records which is being funded by the Trust under the 2009 CD and associated Statement of Work (SOW) (Investigation of Off-Site Material). When that is completed, the VT DEC will review those records with regard to additional investigatory proceedings.

In addition, VT DEC has facilitated discussions with the VT Department of Health (DOH), the State Historical Preservation Office (SHPO), and their own Solid Waste department to ensure that those entities are aware of the proposed work and there are no on-going issues that could inhibit the timely mitigation of on-site concerns. VT DOH has stated that because the Removal Action will be a US EPA fund lead, no permits for asbestos related work will be required. US EPA will coordinate with VT DOH throughout the planning process and will keep them updated regarding site activities. The SHPO's office will require documentation of the on-site structure and its demolition which EPA will fully comply with. This will include photographs, detailed measurements, site history, and the final disposition and location of any waste material disposed of on-site.

In a letter dated July 2, 2013 to the Acting Chief of the US EPA Emergency Planning and Response Branch, the Director of the VT DEC Waste Management and Prevention Division requested US EPA assistance: "This letter is to formally request EPA Removal assistance to address a deteriorating onsite storage building filled with dry asbestos "ore."

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

A. Threats to Public Health or Welfare

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)];

Exposure:

There is a large amount of friable asbestos that is currently stored in a dilapidated building. If the building is left unattended, there is a strong possibility of structural failure which will result in a release of the asbestos to the environment. The building is in an area subject to high winds and precipitation which will further act to disseminate the asbestos.

Approximately 200 people reside within ½ mile, and there is high recreational activity in the vicinity which includes hunting, fishing, all-terrain vehicle riding and hiking.

The main entrance to the former mine area is gated, and other efforts have been made to restrict access to the site, but there has been evidence of trespassers at the site who are likely gaining access at numerous locations throughout the woods and off of pre-existing logging roads and recreational trails.

The popular Long Trail, which traverses the State of Vermont crosses over the peak of Mount Belvidere, a few hundred yards from the site.

Hazardous Substance:

Asbestos (CERCLA hazardous substance (40 CFR 302.4)) is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment.

Asbestos mainly affects the lungs and their surrounding membrane. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the surrounding pleural membrane (lining). Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Higher exposure can lead to thickening of the pleural membrane that may restrict breathing.

The Department of Health and Human Services (DHHS), the World Health Organization (WHO), and the EPA have determined that asbestos is a human carcinogen.

It is known that breathing asbestos can increase the risk of cancer in people. There are two types of cancer caused by exposure to asbestos: lung cancer and mesoltheliomia. Mesotheliomia is a cancer of the pleural membrane or abdominal cavity (the peritoneum). Studies of workers also

suggest that breathing asbestos can increase chances of getting cancer in other parts of the body (stomach, intestines, esophagus, pancreas, and kidneys), but this is less certain.[1]

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

A previous US EPA Removal Action was conducted to prevent further damage to two watersheds which were being adversely affected by tailings runoff. According to the state, Class II wetlands have been significantly damaged, ranging from water quality degradation to complete burial of wetland acreage under many feet of mine waste. Additional release of friable asbestos from any on-site buildings can potentially add to existing contamination of the nearby waterways.

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 dry ore storage building in question currently contains approximately 18,000 cubic yards of crushed dried ore containing high levels of asbestos. Approximately one fourth of the ore within the building is above the grade of the surrounding area and should the building be further compromised, the ore will be released and migrate via environmental factors.

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

Due to a general lack of maintenance and extreme weather conditions, the dry ore storage building is in a state of disrepair. Sections of the roof have peeled away, allowing precipitation and excess moisture to enter and swell the volume of the stored asbestos. With degradation underway, additional windy conditions will exacerbate the damage and therefore let in additional moisture. The additional moisture will increase the volume and pressure being put on the building walls, threatening a structural failure and subsequent release to the environment.

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

The state maintains that they do not have adequate funding necessary to mitigate this potential hazard.

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[1] The toxicological information is derived from 'ToxFAQs for Asbestos', a summary of the Toxicological Profile for Asbestos, 2001, developed by ATSDR Division of Toxicology

B. Threats to the Environment

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)];

Prior to the US EPA removal action in 2007 and 2008, the state discussed how streams within two distinct watersheds have been adversely affected by tailing pile runoff from both asbestos fibers and associated metals. The macroinvertebrate communities present at the Hutchins Brook assessment sites were given an overall assessment of poor, while the macroinvertebrate communities within two of the three sites in the Burgess Branch were rated as fair. The abundance and diversity of macroinvertrebrate communities are used as an indicator of ecosystem health and of local biodiversity and are a key component of the food chain. Actions taken during the previous US EPA Removal Action did not address removing any product that had already migrated from the site but concentrated on preventing or limiting additional off-site migration. Therefore, any asbestos-laden sediment that had previously settled out is still adversely affecting the watersheds. Additional product that is currently stored in the on-site building, should it be released, will only exacerbate the damage to the down-stream ecosystems.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances 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.[2]

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The proposed actions at the site include the controlled demolition of the dry ore storage building and subsequent handling of the asbestos product within. A majority of the asbestos product within the building is anticipated to be below grade. The product that is above grade will be removed with heavy machinery as the building around it is being slowly deconstructed. It is anticipated that the removed product will be placed either in an adjacent 'cell' to be excavated in the tailings surrounding the building or on the surface to near surface of the surrounding tailings. In either case, sufficient cover material to prevent

[2] "In accordance with OSWER Directive 9360.0-34, an endangerment determination is made based on relevant action levels, cleanup standards, risk management guidance, or other relevant information published and relied upon by the State of Vermont."

off-site migration of the product will be placed over the product. This could include the addition of soil amendments that will allow for sustainable vegetation. Pilot studies that began three years ago and are currently being conducted at the site by the US EPA Environmental Response Team and the Department of Agriculture – Agricultural Research Service Laboratory and have shown that with the proper amendments such as compost, gypsum, limestone, and fertilizer, the soil becomes self sustainable and supports vegetation. This in turns stabilizes the ground surface, maintaining the product in place. The product currently believed to remain below grade within the structure will be contained within the confines of the remaining foundation and covered to prevent migration. It is anticipated that the building debris will also be contained on-site within a vegetative covered cell, although any salvageable steel will be decontaminated and segregated. Attempts will be made to sell this steel for scrap value which will be put back into the project and used to reduce total Removal Action costs.

As discussed in Section II.B.1. of this memorandum, US EPA entered into a CD with a prior owner during enforcement proceedings following the previous removal action. Per the CD and associated SOW, a supervising contractor was hired by the Trust. This contractor, ERM, has been tasked with a number of site related activities including but not limited to: site access prevention such as the posting of signs and the construction of fences and barriers, building security (simple fixes such as boarding up of accessible windows and doors, securing of peeling aluminum siding, etc.), a yearly air sampling and meteorological station program along with dust suppression activities should they be necessary based on monitoring results, and the hiring of a security guard service. On Friday, July 19, ERM provided a demolition expert at the request of EPA and the state to examine the structure and determine if there were any outstanding issues that would complicate and/or increase the estimated demolition and on-site disposal costs. While full access to the building was not possible, ERM provided the following in a letter date July 22, 2013: "Based on our visual external inspection, we did not observe any structural issues that would substantially modify the pricing." ERM went on to make a number of recommendations regarding site preparation, wetting procedures, and ongoing health and safety issues that will be examined by EPA and their contractor as the work plan is developed.

As the structure is dismantled and product is moved, water misting will be utilized as necessary to keep the asbestos product from becoming airborne and leaving the site boundary. CD stipulations included the reserve of funding (with finite spending caps) to address various on and off-site issues associated with the former mine. The Trustee for the G-1 Holdings Trust, after consultation with the attorney for G-1, has stated that the trust will provide the funding for the personnel and perimeter air monitoring/sampling necessary for this removal action. There has been maintenance conducted on this structure in the past (securing of a large compromised door) which was funded by the building security fund, but it has been agreed upon by all involved parties, including the Trust, that the structure is beyond 'building security' as described in the above paragraph. Therefore, its demolition and associated costs cannot be borne by that particular pot of money.

The funding for these activities will come under the Monitoring/Dust Suppression Cost Cap which is described in Section V.C. of the CD and Section IV.C. of the associated Scope of Work (SOW).

The On-Scene Coordinator (OSC) will visit the site with the EPA cleanup contractor Response Manager, other contractors deemed appropriate to prepare for removal activities, representatives of the VAG who are familiar with the site, and representatives of other local and state agencies.

Additional activities include:

- The development of the Scope of Work and Health & Safety Plans;
- The construction of a decontamination pad for on-site vehicles;
- The institution of an air monitoring program, for both personnel and perimeter monitoring;
- The procurement and placement of work trailer(s) complete with utilities;
- The setup of a decontamination zone and contamination reduction corridor for any workers within the hot zone;
- In consultation with the State Historical Preservation Office, document the building in its current condition and its demolition per the SHPO's protocol. This may require a specialized subcontractor.

It is anticipated that there will be a site security service in place due to a requirement in the previous CD. This, however, may not be sufficient for the Removal Action where additional security measures may be required.

Due to a short construction season due to winter weather conditions, any work started in 2013 may continue into the spring 2014.

2. Community relations

Prior to any site activity, US EPA will meet with state and local officials to discuss public outreach activities which may include, but are not limited to:

- Coordination of removal activities with the impacted towns and VT DEC;
- Fact sheets for local residents and visits to residents in the immediate vicinity as appropriate;
- Coordination with the impacted towns and VT DEC to determine the need for and subsequent issuance of press releases and/or newsletters with removal action progress status;
- OSC availability at the site during removal activities to address questions and/or concerns from the public;
- Public information sessions and/or public meetings as necessary; and
- Maintenance of an EPA OSC web site.

3. Contribution to remedial performance

The cleanup proposed in this Action Memorandum is designed to mitigate the off-site threats via air transport to human health and the environment and to minimize further off-site migration via contaminated surface water. The actions taken at the site would be consistent with and will not impede any future responses.

4. Description of alternative technologies

Alternative technologies will be discussed as removal activities progress.

5. Applicable or relevant and appropriate requirements (ARARs)

Federal ARARs will be met to the extent practicable considering the exigencies of the situation. The OSC will coordinate with state officials to identify additional state ARARs, if any, and will meet, to the extent practicable, each ARAR identified in a timely manner.

6. Project schedule

Site activities are expected to commence Summer to Fall 2013 and should be completed prior to Winter weather conditions by approximately mid November. If necessary, US EPA and its contractors will remobilize to the site in Spring 2014 to continue on-site work. The total expected time on-site is approximately one to two months.

B. Estimated Costs

COST CATEGORY		CEILING
REGIONAL REMOVAL ALLOWANCE COSTS:		
ERRS[3] Contractor		$1,250,000.00
OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:		
START[4] Contractor		$100,000.00
Extramural Subtotal		$1,350,000.00
Extramural Contingency	15%	$202,500.00
TOTAL, REMOVAL ACTION CEILING		**$1,552,500.00**

[3] Emergency Rapid Response Services

[4] Superfund Technical Assistance and Response Team

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

Delayed action will increase public health risks by allowing further building deterioration and additional precipitation to enter the structure. This in turn leads to further swelling of the asbestos product within the structure and putting additional stress on the building. Once the structural integrity of the building is diminished, there is great potential for the fine, friable asbestos product stored within to be released to 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 Enforcement Strategy.

The total EPA costs for this removal action based on full-time accounting practices that will be eligible for cost recovery are estimated to be $1,552,000 (extramural costs) + $100,000 (EPA intramural costs) = $1,652,000 X 1.4485 (regional indirect rate) = **$ 2,392,922**[5].

IX. RECOMMENDATION

This decision document represents the selected removal action for the VAG Mine Site in Eden and Lowell, Vermont, 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)];

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[5]Direct Costs include direct extramural costs $1,552,000 and direct intramural costs $100,000. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific costs [44.85% x $1,652,000], consistent with the full accounting methodology effective October 2, 2000. These estimates do not include pre-judgement 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.

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)];

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

I recommend that you approve the proposed removal action. The total removal action project ceiling if approved will be $1,552,000.

APPROVAL:_____ DATE: 7/29/13

DISAPPROVAL:_____ DATE:_____