

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

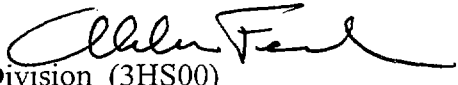
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SDMS DocID 2088117

SEP 13 2006

SUBJECT: Request for Additional Funding and
Exemption from Statutory Limits for a Removal Action
Browning Lumber Site
Bald Knob, Boone County, West Virginia

FROM: Abraham Ferdas, Director 
Hazardous Site Cleanup Division (3HS00)

TO: Susan Parker Bodine, Assistant Administrator
Office of Solid Waste and Emergency Response

THRU: Debbie Dietrich, Director
Office of Emergency Management

ATTN: Gilberto Irizarry, Director
Program Operations and Coordination Division

ISSUE

The attached Action Memorandum pertains to the Browning Lumber Site ("Site"), the location of a defunct wood-treating facility located along Pond Fork near Bald Knob, Boone County, West Virginia. The On-Scene Coordinator ("OSC") responded to this location after the West Virginia Department of Environmental Protection found that the facility had burned, operations had ceased, and the treatment chemical (chromated copper arsenate) had released to the environment. The area of the Site is rural, but the town of Greenwood is located about 1/2 mile away. The OSC initiated Removal Actions at the Site using his delegated authority under EPA CERCLA Delegation of Authority 14-2 and continues to take actions to stabilize the ongoing release. The primary contaminant of concern is arsenic, and soil arsenic concentrations at the Site are significantly higher than levels protective of human health and the environment.

Although the OSC is taking actions, the Removal Action will necessitate additional funding in excess of the OSC's \$250,000 authority. In fact, the Removal Action is estimated to require funds in excess of \$2 million. These observations indicate the need for additional funding for excavation and stabilization of a large area of contaminated soil, removal of the source area, and disposal of hazardous substances. The Site cannot be completely secured due to

its location and is positioned in an area where persons are able to access the Site for various purposes (e.g., off-road vehicle use). The additional CERCLA funding requested in the attached Action Memorandum will be used to conduct removal activities to eliminate the threat by removing the hazardous substances from the Site.

Conditions at the Site meet the criteria set forth in Section §300.415 of the NCP supporting the need for a Removal Action. Additionally, the Region finds that conditions at the Site described above and in the attached Action Memorandum continue to constitute a public health threat warranting time-critical attention, and no other person or agency with authority can respond in a timely manner. The OSC believes that the proposed Removal Action will likely exceed \$2 million of costs from the Regional Removal Allowance. However, the OSC has determined that the Site meets the criteria for emergency exemption from the \$2 million Statutory Limit for Removal Actions identified in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(c)(1)(A). Thus, the attached Action Memorandum approves exemption from the statutory limits for the Removal Action at the Site. The increased funding raises the Estimated EPA Costs for the Removal Action to \$2,515,339 of which \$1,857,339 are from the Regional removal allowance. This allocation will enable Region III to properly address the threats at the Site.

Attachment: Action Memorandum



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SEP 13 2006

SUBJECT: Request for Additional Funding and Exemption from the
\$2 Million Statutory Limit for a Removal Action at the
Browning Lumber Site
Route 85, Bald Knob, Boone County, West Virginia 25010

FROM: Robert Kelly, On-Scene Coordinator
Eastern Response Branch (3HS31) *Frank Jones for RK*

TO: Abraham Ferdas, Director
Hazardous Site Cleanup Division (3HS00)

I. PURPOSE

The purpose of this "Request for Additional Funding and Exemption from the \$2 Million Statutory Limit for a Removal Action" ("Request for Additional Funds") is to request additional funding and exemption from the \$2 million statutory limitation for Removal Actions in order to continue a Removal Action at the Browning Lumber Site ("Site"), which is located near Bald Knob, in Boone County, West Virginia. On June 19, 2006, the On-Scene Coordinator ("OSC") initiated a Removal Action at the Site under CERCLA Delegation of Authority 14-2. The funding ceiling for the Removal Action was \$250,000, which is the limit of the OSC's delegated authority. The initial activities undertaken at the Site were the installation of a fence across an entrance road to minimize the potential for trespass, the installation of silt fencing to minimize the potential for erosion, and sampling of soils and groundwater to further characterize the release of hazardous substances at the Site. However, due to the areal extent of contamination, the overgrown nature of the Site, the destruction by fire and abandonment of a pressurized wood treatment facility, and the location of a stream inhibiting routine vehicle access to the highly contaminated areas of the Site, among other reasons, additional funding will be necessary to continue the proposed Removal Action and the OSC expects that the Removal Action will ultimately exceed \$2 million. The OSC has determined that the Site meets the emergency exemption criteria in Section 104(c)(1)(A) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9604(c)(1)(A).¹

¹ Authority to approve continued removal action beyond the \$2 million/12-month statutory limitation pursuant to the "Emergency Waiver" set forth in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(C)(1)(A), up to a total removal action cost of \$6 million, has been delegated to the Director of the Region III Hazardous Site Cleanup Division pursuant to EPA Delegation 14-2.

The release of hazardous substances at the Site stems from the wood-treating operations of the former Browning Lumber Company, Inc. ("Browning Lumber") facility. The facility used Chromated Copper Arsenate ("CCA") to treat cut lumber so that the wood would not quickly degrade in the environment. The CCA solution contained elevated levels of chromium, copper, and arsenic which are hazardous substances within the meaning of CERCLA because they are listed in Section 302.4 of the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. § 302.4.

The release of hazardous substances at the Site was initially discovered by the West Virginia Department of Environmental Protection ("WVDEP") during routine inspections of the facility and confirmed in follow-up sampling and analysis. A Removal Site Evaluation conducted pursuant to Section 300.415 of the NCP, 40 C.F.R. § 300.415, revealed ongoing releases of hazardous substances, primarily arsenic, from the Site into the environment which pose a threat to human health, welfare, or the environment. At a minimum, hazardous substances are located throughout the surface soils at the Site and within the remains of the facility and are migrating into the drainage toward the nearby Pond Fork (a surface water stream). Hazardous substances, primarily arsenic, are well above concentrations considered to be protective of human health and the environment based upon consultation with the Agency for Toxic Substances and Disease Registry ("ATSDR"). A Time-Critical Removal Action is necessary to mitigate the release of hazardous substances to the surface soils and surface water drainage. The OSC finds that actions are immediately needed to temporarily stabilize the eroding soils and migrating CCA contaminants, minimize the ability for trespassers to access the exposed hazardous substances, and remove the CCA source area and highly contaminated environmental media. The OSC has also determined that a bridge or other cross-stream access road must be constructed to safely transport vehicles, equipment, and personnel across Pond Fork to the most contaminated portions of the Site. The OSC is also to evaluate the extent of the contamination (e.g., deeper soils, sediments, and groundwater) in order to address all Site-wide contamination.

Additional CERCLA funding in the amount of \$1,857,339 is requested above the \$250,000 already authorized by the OSC pursuant to Delegation of Authority 14-2. This additional funding will raise the estimated Removal Project Ceiling to \$2,516,339. This additional funding is necessary to mitigate the threats identified in this Action Memorandum.

II. SITE CONDITIONS AND BACKGROUND

A. SITE DESCRIPTION

1. Regulatory History

The Site is situated at the location of the former Browning Lumber facility, which operated a pressurized wood treatment facility at the Site from approximately 1978 until 1996 and a sawmill at the Site until around 1998. Browning Lumber utilized CCA for pressure treatment processing of lumber. Browning Lumber obtained an EPA ID number for hazardous

waste activity in 1987; the company also received a discharge permit under the National Pollutant Discharge Elimination System ("NPDES") program. The operations were routinely inspected by WVDEP, and operational violations have been previously noted, including, but not limited to, discharges and spillage of CCA from the treatment vessels onto the ground. Sometime after the facility ceased operations, portions of it were allegedly destroyed by fire. During an inspection conducted by WVDEP in July, 2002, to evaluate compliance with the West Virginia Hazardous Waste Management Act, residual materials from the former operations conducted at the facility were observed on the Site.

2. Physical Location/Site Characteristics

The Site is located near Bald Knob, Boone County, West Virginia, at approximate geographic coordinates 37.8475 degrees north latitude and -081.6431 degrees west longitude. The Site is located adjacent to Route 85, approximately 1/5-mile north (downstream) of the confluence of Rock Lick Creek and Pond Fork, and approximately 1/2-mile south (upstream) of the Town of Greenwood. Coal mining operations are prevalent on adjacent properties. The Site is generally bordered to the east by Pond Fork, which flows in a south to north direction. The Site is bordered to the west by wooded areas and steep terrain. The Site is bordered to the south by coal mining operations and to the north by woods. An access road extends from Route 85 through the center of the site and into the wooded areas to the northwest. The access road apparently used to cross Pond Fork, but the stream crossing is no longer serviceable. The Site terrain is mainly flat. However, the grade of the Site and designed drainage features allow run-off from the Site to flow directly into Pond Fork. The Site has minimal vegetation and approximately 1/3 of the property is covered with burn areas, trash, and debris from the former facility. The total acreage of the former Browning Lumber Site property is 16.43 acres.

3. Quantities and Types of Substances Present

The OSC continues to conduct a Removal Site Evaluation. The results of sampling activities conducted in February, 2006 confirm analytical information previously collected by WVDEP. Samples of soil, surface water, and sediment were collected and analyzed. The samples confirmed the presence of elevated concentrations of arsenic and lower levels of other hazardous substances, including, but not limited to, chromium, copper, and mercury.

The OSC finds that the extent of arsenic contamination is likely to accurately depict the quantity of contaminated soil at the Site. Arsenic was found up to concentrations of 191,000 parts per million (ppm) at the abandoned wood treatment vessel and at concentrations between 10 and 1500 ppm throughout much of the operational area of the Site. The OSC estimates the impacted area to minimally cover approximately 2 acres. Samples taken at one-foot depth at the Site in a June, 2006, sampling event showed levels as high as 549 mg/kg of arsenic; however, the depth of contamination is currently not known. If a conservative estimate of 1 foot of depth is used, there may be approximately 3500 tons of contaminated soil at the Site. An unknown amount of equipment, debris, and rubble within the remains of the buildings on-Site is also likely to be contaminated, as are the contents of the treatment vessels.

Additionally, an unknown amount of sediment within the drainage pathways of the Site is contaminated with arsenic at levels up to 213 ppm. The OSC estimates 500 tons of contaminated sediment are present at the Site.

4. National Priorities List

The Site is not on the CERCLA National Priorities List (“NPL”). The OSC is coordinating with the Site Assessment Manager (“SAM”) to assist in evaluating the potential for NPL eligibility. The OSC will attempt to obtain sufficient information for the SAM to perform a Hazard Ranking System evaluation.

5. State and Local Authorities’ Roles

WVDEP has performed an assessment of the Site and has requested EPA assistance. The EPA OSC has coordinated with WVDEP and will continue to coordinate with WVDEP on all Removal Actions taken at the Site.

B. OTHER ACTIONS TO DATE

1. Previous Actions

An underground storage tank containing CCA was reportedly removed under the direction of WVDEP. There are no other previous reported environmental cleanup actions at the Site.

2. Current Actions

Current actions at the Site include the installation of a gate to limit access and the installation of temporary erosion and sedimentation control measures to prevent the migration of hazardous substances into Pond Fork.

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

Section 300.415 of the National Contingency Plan (NCP) lists the factors to be considered in determining the appropriateness of a removal action. At this time, the following sections apply:

§ 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.

Hazardous substances are located within the surface soils of the Site and are migrating

into the nearby aquatic environment. Access to the Site is not restricted and evidence of trespassers using all-terrain vehicles and other equipment is plentiful. Additionally, the OSC noted on June 20, 2006, that potentially contaminated materials were being removed from the site by unknown persons. Persons entering the site are potentially exposed to elevated concentrations of arsenic as well as to other hazardous substances by exposure to contaminated soil and dust.

Arsenic has been linked to non-cancer and cancer effects in humans. Breathing high levels of inorganic arsenic can cause sore throat and irritated lungs. Ingesting very high levels can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white cells, abnormal heart rhythm and damage to blood vessels. Ingestion or breathing of low levels of inorganic arsenic for a long time can cause a darkening of the skin and appearance of small “corns” or “warts” on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling.²

Promulgated Federal or State criteria for sediment contamination levels intended for the protection of aquatic organisms do not exist. To determine if threats are posed to ecological receptors, EPA and the National Oceanic and Atmospheric Administration (“NOAA”) instead rely upon a comparison between site-specific contaminant levels and “screening guideline” levels developed from contaminant- and organism-specific toxicity testing. The “screening guideline” levels identify benchmark sediment contaminant levels at which toxicity testing has established a likelihood of adverse biological effects to exposed aquatic organisms. These guidelines, published by NOAA in the form of screening reference tables, indicate that sediment concentrations of arsenic above 17 ppm and chromium above 90 ppm in freshwater sediment are likely to cause adverse biological effects to exposed aquatic organisms (NOAA Screening Quick Reference Table for Inorganics in Solids (Hazmat Report 99-1 (September 1999))). The concentration of these hazardous substances in the sediments at the Site are significantly higher than the benchmark level by an order of magnitude (e.g, 213 and 236 ppm, respectively) suggesting that effects to the aquatic environment are possible.

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

The residents in the area depend on groundwater for potable use. Further testing is needed to determine if the release of hazardous substances has the potential to impact or may have already impacted any of the drinking water wells in the area. The OSC will also work with WVDEP to identify if any aquatic organisms may be particularly sensitive to the release of hazardous substances from the site into Pond Creek.

²ATSDR Toxicological Profile for Arsenic, September 2005

§ 300.415 (b)(2)(iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.

Several vessels containing a unknown amount of CCA and its residues are located on the Site. A tank containing an unknown amount of liquid has a broken pipe and open top which allows for the release of some of the contents; especially after a rain event. The pressure vessels also contain an unknown amount of solid residues. These tanks and vessels are located adjacent to an area of soil and a portion of the former facility which show evidence of past releases and contain high levels of arsenic.

§ 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.

Arsenic has been detected on the Site in levels up to 191,000 ppm, but more typically at concentrations between 10 and 1500 ppm. All run-off from the Site leads down-gradient to Pond Fork, and the Town of Greenwood is located downstream from the site. The OSC observed soil migrating from the contaminated areas of the Site to Pond Fork on June 20, 2006, after a rain event. The soil and rain run-off flows to Pond Fork via a designed drainage-way.

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

Heavy rains at the Site will cause the arsenic and contaminated soils to migrate into Pond Fork. The slope of the Site suggests that all run-off leads into a drainage pathway designed to convey water into Pond Fork.

§ 300.415 (b)(2)(vii) The availability of other appropriate federal or state response mechanisms to respond to the release.

The WVDEP has requested EPA assistance with the Site as they do not have the resources currently available to perform a removal action of this magnitude. No other federal or state response mechanisms are currently available to perform the actions necessary to mitigate the threats to public health and the environment presented by the release or threatened release of hazardous substances and pollutants and contaminants at the Site.

IV. ENDANGERMENT DETERMINATION

Actual and threatened releases of hazardous substances and/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.

V. EXEMPTION FROM STATUTORY LIMITS

The OSC initiated the Removal Action using his authorities delegated pursuant to EPA CERCLA Delegation of Authority 14-2. The Removal Actions necessary to mitigate the threats identified in this Action Memo are estimated to be more than \$2 million. The elevated cost is primarily resulting from the areal extent of contamination, which suggests the likelihood of a significant amount of material requiring disposal; the destruction of the Browning Lumber wood treatment facility by fire, which has caused a large pile of contaminated debris and rubble in the facility's operational area; and the overgrown nature of the Site and the need for a stream crossing, which hinder efficient response operations. The hazardous substances at the Site pose a threat to human health and the environment and will continue to pose this threat until the Removal Action identified in the OSC's initial Action Memorandum (Special Bulletin A) and this Request for Additional Funds is completed. The Removal Action will require additional funding to enable the OSC to complete the actions defined later in this memo. This additional funding will result in a total estimated project ceiling which is greater than \$2 million.

The Site meets the "emergency exemption" criteria set forth in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(c)(1)(A), for exceedance of the \$2 million statutory limit for Removal Actions as follows:

A. Section 104(c)(1)(A)(i) "Continued response actions are immediately required to prevent, limit, or mitigate an emergency."

The focus of the Removal Action has been to stabilize the erosion of contaminated soil into Pond Fork and to minimize the potential for access to prevent future human exposure. The OSC is conducting a continuing evaluation of the Site and finds that the operations needed to minimize the erosion and prevent exposure will ultimately exceed \$2 million. The concentration of hazardous substances at the Site poses a threat to the public health and the environment. The proposed actions will eliminate the immediate threats by reducing the potential for exposure to hazardous substances at the Site and eliminate the migration of hazardous substances to Pond Fork. Without an exemption from the statutory limits, the Removal Action will not be completed and threats posed by the Site will not be meaningfully reduced.

B. Section 104(c)(1)(A)(ii) "There is an immediate risk to the public health or welfare or the environment."

The contaminated area poses a threat to Pond Fork and to the public via direct contact, inhalation, and/or incidental ingestion of hazardous substances, as described in Section III above. Elevated concentrations of hazardous substances found at the Site were found to be potentially toxic to aquatic organisms, above EPA's typical protective levels (e.g. EPA Risk Base Concentrations (RBC's)) exposed at the surface, and able to migrate. Unless the Removal Action includes stabilization of the eroding soil and removal of the highly contaminated source areas, the Removal Action will not acceptably mitigate the threats posed by the Site. There is ample evidence of trespass onto the Site, potentially contaminated materials may have recently

been removed from the Site by unknown persons, and a large amount of contaminated soil may be migrating into Pond Fork through designed drainage-ways. The levels of arsenic found in the soil at the Site are well above levels typically thought to be protective of exposed individuals in a non-residential setting.

C. Section 104(c)(1)(A)(iii) “Assistance will not otherwise be provided on a timely basis.”

The WVDEP continues to request that EPA take the lead on response activities at the Site. EPA has identified potentially responsible parties (“PRPs”), but has not yet reached an agreement with any of them to perform the Removal Action. EPA’s assistance will be necessary to ensure that threats posed by the Site are mitigated in a timely manner.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action Description

The objectives of the proposed action are to prevent the continued migration of contaminated soil from the Site, prevent the potential for exposure to contaminated soil, and to remove sources of contamination to the environment. Additionally, the OSC will continue to conduct a Removal Site Evaluation to accurately determine the extent of the contamination (particularly its depth and extent into the aquatic and/or groundwater regime).

The Removal Action shall consist of the following:

1. Maintain previously installed chain-link fence at Site to provide security sufficient to preclude access to all areas containing hazardous substances at the Site by persons not conducting the response action, and to all areas which will be used to facilitate, access, or support the response action;
2. Provide basic fire protection at the Site to minimize the potential for a release of hazardous substances during a fire;
3. Maintain access-way (e.g., road, bridge, stream crossing) on-Site to allow for safe crossing of Work-related vehicles, personnel, and equipment over Pond Fork;
4. Maintain temporary erosion and sedimentation control measures to prevent the migration of hazardous substances into Pond Fork throughout the response action;
5. Sample any liquids and residues present at the Site, including liquids and residue present on vessels, equipment, tanks, containers, and structures in order to determine the chemical nature of such liquids and residues;
6. Remove all liquids and residues present at Site and place within appropriate

containers suitable for off-Site transportation and disposal. Decontaminate all vessels, equipment, tanks, and structures consistent with the closure requirements of Part 265 of the Resource Conservation and Recovery Act ("RCRA") relating to tanks (Subpart J) and drip pads (Subpart W);

7. Conduct an extent of contamination study which will characterize, through sampling, the nature, concentration, extent, and depth of arsenic and other hazardous substances listed below that are present at the Site in soils, surface water, sediments, and groundwater at concentrations above action levels specified in Paragraph 8 below. The extent of contamination study will provide sufficient data to evaluate the chemicals of concern at the site, as appropriate and approved by EPA:
 1. RCRA Heavy Metals: Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Selenium, and Silver;
 2. Semi-Volatile Organic Compounds as listed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Method 8270;
 3. Volatile Organic Compounds as listed in SW-846, Method 8260; and
 4. Pesticides and PCBs as listed in SW-846, Method 8080;
8. The clean-up level for arsenic in soil and drinking water shall be within the EPA acceptable risk range and to at least 190 mg/kg in soil and 4.5 ug/L in drinking water. These numbers are based on a cancer risk of 10^{-4} and a hazard quotient greater than one. The clean-up level for other contaminants of concern found in soils shall also be below a cancer risk of 10^{-4} and a hazard quotient greater than one as defined in EPA's Risk Based Concentration ("RBC") tables. The cleanup level for arsenic in sediment shall be 42 mg/kg. The clean-up levels for other contaminants of concern in sediments and in surface water shall be based on water quality standards that have been established under the Clean Water Act, 33 U.S.C. §§ 1251-1387, for the waterways at the Site;
9. Excavate soils (within 2 feet of ground surface or below that to the extent practicable) and all sediments identified in the extent of contamination study required by Paragraph 8 that contain hazardous substances in excess of the clean-up levels specified in Paragraph 8. Soil remaining at depths of greater than two feet that contain levels above 190 mg/kg of arsenic must not leach arsenic above 5.0 mg/L as tested using the Toxicity Characteristics Leaching Procedure ("TCLP") and will be treated, as appropriate, to achieve that standard;
10. After completion of response activities described above, conduct post-excavation and/or treatment sampling to ensure that hazardous substance levels at the Site are below the clean-up levels specified in Paragraph 8;

11. Fill all excavated areas with clean fill material using an approved compaction method. In areas where soil contamination above the specified clean-up levels remains in place at depths greater than two feet below the native ground surface, place an appropriate warning barrier and cover such areas with clean soil to prevent direct contact with contaminated soil;
12. Properly dispose off-Site any soil, sediment, liquids, residues, debris, or contaminated water from the Work items described above (e.g., decontamination of equipment and sampling-related fluids) in accordance with applicable requirements of RCRA and in accordance with CERCLA 121(d)(3) and 40 CFR 300.440;
13. Install permanent erosion and sedimentation controls (e.g., vegetative cover) at completion of response action to stabilize Site soils;
14. Provide for Post-Removal Site Control activities consistent with Section 300.415 (l) of the NCP, 40 C.F.R. § 300.415 (l); and EPA's "Policy on Management of Post Removal Site Control", (OSWER Directive 9360.2-02 (December 3, 1989)). Such activities shall include, but not be limited to, arrangements with State or local governments for performance of actions that will ensure the integrity of the work performed at the Site pursuant to this Settlement Agreement through operation and maintenance, actions that will continuously restrict access to the Site, and measures that will ensure continuous review of monitoring data. For purposes of this paragraph, "arrangements with State or local governments for the performance of actions" shall mean submitting, by agreement or otherwise, to enforceable requirements determined by the State or local government to meet the criteria set forth in this paragraph, and shall include public participation and comment as required by the State or local government and the NCP; and
15. Implement institutional controls to prevent future disturbance, such as excavation, of areas of Site where contamination remains at depths greater than two feet below the native ground surface. Coordinate with the current owner of the Site Property and with the appropriate State and local authorities for the implementation of such institutional controls.

B. Contribution to Remedial Performance

The actions proposed will contribute to any future remedial actions which may be necessary at the Site.

C. Applicable or Relevant and Appropriate Requirements ("ARARs")

The proposed removal action will attain ARARs to the extent practicable given the exigencies of the situation. The OSC will consider the relevant and appropriate requirements of

RCRA Parts 265 and 268 when removing hazardous substances from the facility and treating Site media. The OSC contacted WVDEP in June and requested all applicable ARARs. However, since the full extent of contamination and the scope of the action are not yet fully defined, State ARARs have not been fully identified at this time. The OSC will continue to work with WVDEP regarding the identification of State ARARs.

D. Estimated Costs

The proposed distribution of funding is as follows:

	Present Ceiling	Ceiling Increase	Total
<u>Extramural Costs:</u>			
<u>Regional Removal Allowance Costs:</u>			
Total Cleanup ERRS Contractor Costs	\$130,000	\$1,633,839	\$1,763,839
IAG-US Army Corps of Engineers	\$ 80,000	\$ 73,500	\$ 150,500
(This cost category includes estimates for ERRS, subcontractors, Notices to Proceed, and Interagency Agreements with Other Federal Agencies. Includes a 20% Contingency.			
Other Extramural Costs Not Funded from the Regional Allowance:			
Total START, including multiplier costs	\$ 40,000	\$ 100,000	\$ 140,000
Total CLP	----0----	\$ 50,000	\$ 50,000
Subtotal			\$ 190,000
Subtotal Extramural Costs			\$2,104,339
Extramural Costs Contingency (20% of Subtotal, Extramural Costs; round to nearest thousand)			\$ 412,000
TOTAL REMOVAL ACTION PROJECT CEILING			\$2,516,339

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

If the proposed actions at the Site are not implemented or are delayed, hazardous substances will continue to release into the environment and nearby human populations and the environment will continue to be threatened by the potential for exposure to hazardous substances.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues at this Site.

IX. ENFORCEMENT

Based on the information currently available, it is recommended that Superfund monies be allocated to complete the removal activities at the Site. A confidential enforcement addendum has been prepared and is included as an attachment to this document.

The total EPA costs for this removal action based upon full-cost accounting practices that will be eligible for cost recovery are estimated below as follows:³

Direct Extramural Costs:	\$ 2,516,339
Direct Intramural Costs:	\$ 60,000
Indirect Costs	\$ 1,418,790
Estimated EPA Costs for the Removal Action	\$ 3,995,129

X. RECOMMENDATION

This Action Memorandum represents the selected Removal Action for the Browning Lumber Company Site in Bald Knob, Boone County, West Virginia, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

By signing this Action Memorandum, you are also hereby establishing the documents listed below as the Administrative Record supporting the issuance of this Action Memorandum, pursuant to Section 113 (k) of CERCLA and EPA Delegation No. 14-22.

³Direct 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.

1. Sample results from EPA February 14-18, 2006 sampling event
2. Sample results from EPA June 27, 2006 sampling event
3. Sample results from EPA July 10-12, 2006 sampling event
4. ATSDR Record of Activity dated June 14, 2006

Action by the Approving Official

Because conditions at the Browning Lumber Site meet the Removal Action requirements of the NCP, I recommend your approval of the proposed Removal Action. The total Removal Action Project Ceiling, if approved, will be \$ 3,995,129. Of this, an estimated \$2,516,339 comes from the Regional Removal Allowance. Please indicate your approval or disapproval below.

Action by the Approving Official:

I have reviewed the above-stated facts and based upon those facts and the information compiled in the documents described above, I hereby determine that the release or threatened release of hazardous substances at and/or from the Site presents or may present an imminent and substantial endangerment to the public health or welfare or to the environment. I concur with the recommended removal action as outlined.

APPROVED: Abraham Ferdas

DATE: 9/13/06

Abraham Ferdas, Director
Hazardous Site Cleanup Division
EPA Region 3

DISAPPROVED: _____

DATE: _____

Abraham Ferdas, Director
Hazardous Site Cleanup Division
EPA Region 3

Attachment: Enforcement Confidential Memo