



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUL 17 2007

ACTION MEMORANDUM

SUBJECT: Request for Funding and Approval of a Ceiling Increase, Change in Scope of Response, and Consistency Exemption from the \$2 Million and 12-Month Statutory Limitations at the Picayune Wood Treating Site in Picayune, Pearl River County, Mississippi

FROM: Karen B. Buerki, On-Scene Coordinator *KB*
Emergency Response and Removal Branch

THRU: A. Shane Hitchcock, Chief
Emergency Response and Removal Branch

TO: Franklin E. Hill, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed ceiling increase and change in scope of response for the time-critical removal action, described herein, for the Picayune Wood Treating Site (Site) located in Picayune, Pearl River County, Mississippi. This Action Memorandum also requests a Consistency Exemption from the \$2 Million and 12-Month Statutory Limitations. Conditions that exist on the Site pose a threat to public health, welfare, and the environment that meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 CFR §300.415(b) criteria for removal actions and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §9601, et. seq., Section 104(c) criteria for a consistency exemption. If approved, the removal action project ceiling will be \$12,942,000, an increase of \$6,978,000, of which an additional \$4,625,000 is allocated to ERRS from the FY07 and FY08 Regional Removal Advice of Allowance.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID Number: MSD065490930
Site ID Number: A4W2
Type: Time-Critical Removal

A. Site Description

The Site consists of approximately 30 acres of property located at 403 Davis Street, in Picayune, that used to be the location of Wood Treating, Inc., (WTI or Facility). The Site also includes the residential and commercial neighborhood that surrounds the Facility and borders Mill Creek and its tributaries. WTI treated wood products using creosote and pentachlorophenol (PCP). It shut down in 1999. The surrounding neighborhood consists of approximately 93 parcels. Storm water from the Facility discharges into Mill Creek. Mill Creek runs southwest through the neighborhood. The Site is contaminated with high concentrations of dioxin, polycyclic aromatic hydrocarbons (PAHs), and PCP from the operation of the wood treatment facility. Off-site releases have contaminated the surrounding neighborhood. Storm water in contact with the contaminated soil currently discharges into Mill Creek.

1. Removal Site Evaluation

A Phase IV Remedial Investigation was conducted during 2004 and 2005. Supplemental data was collected in July 2006. The Draft Data Summary Report for the Phase IV Investigation, dated July 2005, revealed high levels of dioxin, PCP, and PAHs in the neighborhood surrounding the Site. The Remedial Program referred the Site to the Removal Program for assessment.

During a removal site evaluation on August 4, 2005, by OSC Karen Buerki and RPM Humberto Guzman, the 30-mil liner used to temporarily cap an on-site hazardous waste pile was inspected and was observed to have developed tears, allowing storm water to leach thru the waste. The neighborhood surrounding the Facility was inspected for contamination and possible routes of exposure. Even though a chain link fence has been put up along parts of Mill Creek, access is still possible as evidenced by foot paths across Mill Creek. A large pile of soil in the neighborhood and adjacent to Mill Creek contained dioxin at 7.40 ppb toxicity equivalents (TEQ). It appeared to have been dredged from Mill Creek. Outside of the chain link fence surrounding the Facility on the southern property line, dioxin in surface soil was found at 27 ppb TEQ.

TEQs for dioxin were established in EPA's Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update, EPA625/3-89/016. Region 4 has adopted the 2005 World Health Organization (WHO) TEFs for calculation of risk via TEQ. In addition, EPA established 1 ppb TEQ as the residential clean-up goal for dioxin in OSWER Directive 9200.4-26, dated April 13, 1998. A similar calculation for carcinogenic PAHs as a benzo-a-pyrene (BaP) TEQ was established in EPA's Risk Assessment Guidance for Superfund (RAGS) document.

Removal Assessment sampling of residential properties and Mill Creek was conducted by START contractor TTEMI during October and November 2006. The Removal Assessment Report was finalized on June 20, 2007. The results show Dioxin TEQs in Mill Creek as high as 32 ppb and in residential soil as high as 19 ppb. BaP TEQ as high as 188.35 ppm was discovered in a pile of dredged sediment located along Mill Creek. As of April 27, 2007, contaminant levels have been found above site-specific risk-based cleanup goals on 46 individual properties.

2. Physical Location

The Site is located at, but not limited to, 403 Davis Street, in Picayune, Pearl River County, Mississippi. The Site encompasses the Facility property of approximately thirty acres and approximately 93 property parcels adjacent either to the Facility, Mill Creek, or a tributary to Mill Creek. The Site consists of single family residential property to the west, single and multi-family residential property, an elementary school, city park, and day care centers to the southwest and to the south, and residential and industrial property to the north and south.

3. Site Characteristics

The Facility has several buildings, storm water ditches, piles of debris, concrete pads, two surface impoundments, a pond, and a hazardous waste pile located on it. The J. P. Johnson Park is located south of the Facility and adjacent to Mill Creek and is used for recreation. There is also a housing project that is located adjacent to Mill Creek. Surface drainage from the Facility flows to the south and southeast into drainage swales and into Mill Creek. Tanks and treatment vessels were removed during the 1999-2001 removal action. Contamination above action levels does not appear to extend west beyond S. Beech Street.

4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

Dioxin, PCP, and PAHs have been released into the surface soil and groundwater on-site. Dioxin, PCP, and PAHs are hazardous substances as defined in Section 101(14) or CERCLA. Wood treating solutions used at the Facility are the source of the contaminants. The depth of the contamination has not been determined. This removal action may address up to two (2) feet below ground surface (bgs) of soil and sediment. The estimated volume of contaminated soil and creek sediment in the surrounding neighborhood is 20,000 cubic yards.

5. NPL Status

The Preliminary Assessment and Site Inspection (PA/SI) was completed on May 9, 2001. Picayune Wood Treating was proposed to the National Priorities List (NPL) on March 8, 2004. The Site was listed on the NPL on July 22, 2004. The RI/FS, including a Human Health Risk Assessment, was completed in April 2007.

6. Maps, Pictures, and other Graphic Representations

The Administrative Record (AR) for the Site should be consulted for supporting documentation of the Site conditions and background information.

B. Other Actions to Date

1. Previous Actions

EPA initiated removal action under an Emergency Action Memorandum dated October 21, 1999 (see Attachment A). Pursuant to EPA Region 4 Delegation 14-2. Response, authority to obligate CERCLA funding in the amount of \$200,000 to initiate Removal Actions where site conditions constitute an emergency was delegated to the OSC. The Removal Action was continued under an Action Memorandum dated March 13, 2000 (see Attachment B), which included an emergency exemption of the 12-month and \$2 million statutory limitations for removal actions. A ceiling increase Action Memorandum was approved on September 7, 2006, to complete remaining on-site response actions (see Attachment C).

The Agency for Toxic Substances and Disease Registry (ATSDR) completed a Health Consultation for the Picayune Wood Treating Site on November 30, 1999. ATSDR completed additional Health Consultations on January 13, 2005, and January 5, 2006, based on data collected during the Remedial Investigation. The Remedial Program completed the Feasibility Study in April 2007 which includes a site-specific Human Health Risk Assessment.

2. Current Actions

The Remedial Program is moving forward with the proposed plan for a Record of Decision.

C. State and Local Authorities' Roles

1. State and local actions to date

None

2. Potential for continued State/local response

The role of all of the State and local authorities involved in this action is expected to consist of assisting the EPA with public meetings and other public relations activities, as needed, serving as a liaison between other interested public agencies, and providing input on Site post removal site control, if necessary, as provided for in the NCP. State and local governments have not been able to fund the necessary removal action.

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

This Site meets the following criteria from the NCP at 40 CFR §300.415(b) (2) for a removal action:

A. Threats to the Public Health or Welfare

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Hazardous substances such as dioxin, PAHs, and PCP in the soil have been detected at the surface and buried within the Site. These substances are considered carcinogenic. The Site consists of mostly residential property and it is unsecured with respect to access. The hazardous substances in the soil pose a direct contact threat to the surrounding population. Exposure may increase the risk for developing cancer. In addition, the storm water drainage from the Site carries contaminated sediment into Mill Creek.

- (iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Buried and surficial soil located on the Site contains high concentrations of dioxin, PAHs, and PCP. Storm water drainage from the Site erodes contaminated soil into Mill Creek and the surrounding area. Dioxin has been found at 27 ppb TEQ at the southern property line of the Facility and 19.0 ppb TEQ in residential soil. PAHs have been found at 188.35 ppm BaP TEQ in dredged sediment and PCP have been found at 84 ppm in residential surface soil. Dioxin in Mill Creek has been found as high as 32 ppb TEQ.

- (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

Precipitation carries contaminants from the Facility property into Mill Creek. During flood conditions, contaminated sediment is deposited onto residential property along Mill Creek.

B. Threats to the Environment

- (ii) Actual or potential contamination of sensitive ecosystems;

The drainage from the Site enters Mill Creek. This habitat may be affected through bio-accumulation of dioxin in the organisms in the benthos layer.

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.

V. EXEMPTION FROM STATUTORY LIMITS

A. Emergency Exemption

An emergency exemption was approved in the March 13, 2000, and September 7, 2006, Action Memos.

B. Consistency Exemption

A consistency exemption is being requested for this removal action based on the following criteria:

1. Continued response actions are otherwise appropriate and consistent with the remedial action to be taken. This removal action will prevent continued exposure of residents to hazardous substances in their yards and to prevent further migration of hazardous substances from the Facility. This removal action does not foreclose the remedial actions being proposed in the Feasibility Study for this Site.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action

1. Proposed Action Description

Actions in addition to those approved in the September 7, 2006, Action Memorandum which may be necessary to abate the threats posed by the Site include the following:

- a. Prepare and implement a Health and Safety Plan, Removal Work Plan, Quality Assurance and Sampling Plan, and Community Relations Plan;
- b. Clear and grub the Site and excavate an area to be used for decontamination, staging, and support. Provide for re-use, recycling, or disposal of surface debris. Sample, profile, and dispose of the excavated waste;
- c. Provide access control to the Site;

- d. Provide for a topographic survey of the Site;
- e. Design and construct storm water improvements to the Site that will prevent further off-site migration of contamination from the Facility and re-locate utility lines as necessary to facilitate these improvements;
- f. Abandon groundwater recovery wells, as necessary;
- g. Manage and treat, as necessary, storm water run-off into Mill Creek;
- h. Remove contaminated sediment from approximately 3,650 linear feet of Mill Creek and its tributaries and stockpile securely on the Facility property;
- i. Remove contamination from an estimated 46 parcels surrounding the Facility based on available data and stockpile securely on the Facility property;
- j. Provide backfilling as necessary (institutional controls may be necessary if any contamination is left in place);
- k. Provide for temporary relocation as necessary;
- l. Restore the Site including placement of sod or some other erosion control and repair or replace damaged property and provide post-closure site controls as necessary and provided for in the NCP.

A tiered approach may be used to prioritize properties meeting the criteria for removal action. In consultation with EPA's Technical Services Section, residential properties may be prioritized according to contaminant levels and the presence or absence of young children and/or pregnant women in the home.

2. Contribution to Remedial Performance

This removal action is consistent with remedial plans for the protection of human health and the environment. Contamination on residential properties and in Mill Creek will be addressed for the identified contaminants of concern. The removal action will contribute to remedial performance by addressing source contamination from a residential setting deemed to be a time critical removal action. Excavated material will be stockpiled on the Facility property. Treatment and disposal options for the excavated material may be addressed by the Removal Branch or be incorporated into future remedial actions.

3. Description of Alternative Technologies

Treatment options will be considered and appropriate analytical and bench scale testing will be conducted to determine cost and effectiveness.

4. EE/CA

As this is a time-critical removal action, no EE/CA is necessary.

5. Applicable or Relevant and Appropriate Requirements (ARARs)

A request to identify state ARARs was sent to the Mississippi Department of Environmental Quality (MDEQ) on August 10, 2006. MDEQ responded in a letter dated September 12, 2006. MDEQ identified Mississippi Ambient Water Quality Criteria, Mississippi Ambient Air Quality Standards, and the Mississippi Brownfield Voluntary Cleanup and Redevelopment Act as potential ARARs. EPA will evaluate each of these to determine their relevance to the Site. Attainment of the Resource Conservation and Recovery Act (RCRA) ARAR for storage of hazardous waste has been determined to be not practicable due to the exigencies posed by the Site. All applicable laws will be complied with for off-site transportation, treatment, and disposal of hazardous wastes, hazardous materials, pollutants, or contaminants including RCRA Land Disposal Restrictions. The Off-Site Rule requirements will be met.

6. Project Schedule

The Removal Action is expected to take approximately twelve months and is highly dependent on weather conditions, access to property, and laboratory turnaround time.

B. Estimated Costs

An independent government cost estimate of the removal action project ceiling was prepared using rates from the Emergency and Rapid Response Services Contract (ERRS), START-3 contract, and prior experience.

<u>Extramural Costs:</u>	<u>Current</u>	<u>Increase</u>	<u>Total</u>
Regional Removal Allowance Costs:			
ERRS Contractor	\$4,700,000	\$4,625,000	\$9,265,000
Other Extramural Costs not funded from the Regional Allowance:			
START-3	\$500,000	\$500,000	\$1,000,000
ERT/REAC	\$0	\$375,000	\$375,000
USCG	\$100,000	\$0	\$100,000
CLP	\$100,000	\$375,000	\$475,000
Subtotal	<u>\$5,400,000</u>	<u>\$5,815,000</u>	<u>\$11,215,000</u>
10-20% Extramural Contingency	\$564,000	\$1,163,000	\$1,727,000
<u>Total Removal Action Project Ceiling:</u>	<u>\$5,964,000</u>	<u>\$6,978,000</u>	<u>\$12,942,000</u>

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

The situation at the Site will only worsen if immediate action is delayed or not taken. The Site is unsecured and within a residential neighborhood, increasing the likelihood for direct dermal contact exposure. Highly contaminated soils and sediment will continue to expose the residents and the food chain to dioxin, PCP, and carcinogenic PAHs.

VIII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues.

IX. ENFORCEMENT

Potentially Responsible Parties (PRPs) have been identified; however, they have not been proven to be financially viable. Therefore, EPA will initiate a fund lead removal action and continue the PRP search concurrently. 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 \$19,000,000.¹ For more detailed enforcement information see Attachment - "Enforcement Sensitive".

¹ Direct 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 the 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 costs from this estimate will affect the United States' rights to cost recovery.

X. RECOMMENDATION

This decision document represents the selected removal action for the Picayune Wood Treating Site in Picayune, Pearl River County, Mississippi, 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 meet the NCP 40 CFR §300.415(b) criteria for a removal action and the CERCLA Section 104(c) consistency exemption from the 12-Month and \$2 Million statutory limitations. I recommend your approval of the proposed ceiling increase, change in scope of response, and consistency exemption. If approved, the removal action project ceiling will be \$12,942,000, an increase of \$6,978,000, of which an additional \$4,625,000 is allocated to ERRS from the FY07 and FY08 Regional Removal Advice of Allowance.

APPROVED:  DATE: 7/18/07
Franklin E. Hill
Director
Superfund Division

DISAPPROVED: _____ DATE: _____
Franklin E. Hill
Director
Superfund Division

Attachments