



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

Picayune
29
V.

ACTION MEMORANDUM

MAR 13 2000

DATE:

SUBJECT: Request for a Removal Action Ceiling Increase and Exemption from the \$2 Million and Twelve Month Statutory Limits at the Picayune Wood Treating Site in Picayune, Pearl River County, Mississippi

FROM: Gerald F. Foree, OSC

TO: Richard D. Green, Director
Waste Management Division

Site ID: A4W2
CERCLIS: MSD065490930

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action described herein for the Picayune Wood Treating Site in Picayune, Pearl River County, Mississippi. This Action Memorandum also requests an exemption from the \$2 million and twelve (12) month statutory limits. The initial request for the removal activity is \$3,564,000 of which \$3,224,000 will be utilized for the ERRS contractor.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

A removal site evaluation performed on October 19, 1999 by On-Scene Coordinator (OSC) McAdams and representatives from the State of Mississippi, in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.410, has determined that there was a threat to public health or welfare or the environment posed by ongoing and potential releases of contaminated waste water from the Site. Contaminated waste water from inadequate, uncontrolled and unmonitored aboveground storage tank (AST) secondary containment areas, a leaking DOT highway transport tanker, an open top waste storage vat and overflowing drum/bucket/containers are located throughout the site continues to be sources of off-site migration.

Pentachlorophenol (PCP) and creosote related contaminants from past facility operations are CERCLA Hazardous Substances. CERCLA contaminants, if released from the site, have the capability of presenting a potential hazard to the general public. Contaminated waste water from the site flows through a public park and residential area, adjacent to the site. Based on a review of the removal site evaluation, the OSC has determined that the site meets the criteria for initiating a Removal Action under Section 300.415 of the NCP. As a result of site conditions, immediate action pursuant to Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), is needed.

2. Physical Location

The facility is located on 401 Davis Street in Picayune, Pearl River County, Mississippi. It is located within the city limits. The property is approximately 25 acres in size. The property is bordered by industrial businesses; however, surrounding land includes residential and commercial settings. The site is bordered on the east side by Mill Creek, which is contaminated with creosote waste.

3. Site Characteristics

The facility was constructed in 1946 by Crosby Forest Products, Incorporated. In 1973, the facility was purchased by Wood Treating, Incorporated (WTI) until it ceased operations in 1999. WTI used creosote, pentachlorophenol (PCP), and copper chromium arsenate (CCA) in its wood treating process. The primary structures on Site include a two-story office buildings and a storage trailer. There are also nine (9) small buildings, three (3) pressure tanks, twenty-seven (27) storage tanks/vats, three (3) tanker trailers, and several pieces of heavy equipment for moving logs. There are three (3) burial trenches located on the western part of the site. They measured 50-75 yards long, 10-15 feet wide and 7 feet deep. A cooling water pond is located on the north end of the site.

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

EPA has determined that a release of a hazardous substance as defined by Section 101(14) of CERCLA has occurred at the Site. The facility used creosote to preserve wood. The trenches received creosote sludges from 1975 to 1980. The cooling water pond was used as a holding pond for creosote-contaminated wastewater from 1946 to 1985.

WTI is identified as a generator of K001 hazardous waste and engaged in the storage of K001 hazardous waste in tanks. K001 hazardous waste is a bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. K001 is known to contain one or more of the following hazardous constituents: Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol,

2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenol, tetrachlorophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, benzo(a)anthracene, ideno(1,2,3-cd)pyrene, dibenzo(a)anthracene and acenaphthalene. These compounds are part of a larger group known as polycyclic aromatic hydrocarbons (PAHs).

Groundwater samples collected by WTI during August 20, 1985 through December 19, 1986 showed elevated levels of the following hazardous constituents:

naphthalene	17,000 ppb ¹	acenaphthalene	1,500 ppb
phenol	7,800 ppb	1,4 dimethylphenol	12,000 ppb
phenanthrene	2,100 ppb	fluoranthene	590 ppb
pentachlorophenol	90 ppm ²	phenol	36 ppb
2-chlorophenol	390 ppb	p-chloro-m-creosote	340 ppb
2,4-dinitrophenol	50 ppb	trichlorophenols	18 ppb
benzo(a)pyrene	80 ppb	carszole	130 ppb
tetrachlorophenols	18 ppb	chrysene	10 ppb

Soil samples were collected in January 9, 1995 around the Pressure Treatment Process Area, the Sand Filter Bed Unit, and the Storage Tank/Work Tank Area. Analysis indicated elevated concentrations of PAHs:

Pressure Treatment Process Area		Sand Filter Bed Unit		Storage Tank/Work Tank Area	
benzo(a)pyrene	154 ppm	benzo(b)fluoranthene	359 ppm	benzo(b)fluoranthene	240 ppm
benzo(a)anthracene	498 ppm	benzo(a)anthracene	529 ppm	benzo(a)anthracene	575 ppm
pentachlorophenol	227 ppm	pentachlorophenol	520 ppm	pentachlorophenol	1,185 ppm

¹ Parts per billion

² Parts per million

There are three tanks with a 65,000 gallon capacity each. One of the tanks contains approximately 30,000 gallons of creosote. The remaining two tanks contain unknown amounts of creosote-contaminated wastewater. A sample was collected from the material leaking from the tanks. Data results indicated elevated concentrations of PAHs including: 860 ppm benzo(a)pyrene, 960 ppm benzo(b)fluoranthene, and 3000 ppm benzo(a)anthracene.

5. NPL Status

The Site is not currently on the NPL. Due to the data detected, the EPA remedial program has initiated a study of the Site to determine if the Site may be a candidate for the NPL.

6. Maps, pictures and other graphic representations

All removal file information, which includes photos, sketches, video, etc., will be maintained by the OSC, and released to the EPA record center for inclusion in the site file.

B. Other Actions to Date

1. Previous Actions

During the period, between 1981 through 1998, WTI has been inspected by the Mississippi Department of Natural Resources (MSNR) and the Mississippi Department of Environmental Quality (MDEQ). Several of the inspections revealed various deficiencies and violations of RCRA. Some of those violations and deficiencies include the following: failure to control entry into the hazardous waste surface impoundments and trenches at the facility; old sand filter bed not in compliance with RCRA; incomplete closure plans for hazardous waste disposal units; failure to properly locate or properly sample groundwater monitoring wells; failure to maintain operating records; failure to properly inspect surface impoundments for leaks, deterioration or failure; improper disposal of wastes in unpermitted tanks; failure to operate groundwater pumping systems for recovery and treatment of contaminated groundwater; and failure to timely install a drip pad in the process area.

The facility was initially referred to ERRB for assessment by EPA's Resource, Conservation and Recovery Act (RCRA) program. OSC Tillman McAdams conducted a removal assessment of the facility on October 19, 1999. On October 21, 1999, based on the completed removal assessment, OSC McAdams requested emergency response actions to stabilize the site from ongoing releases. OSC Tony Best (R1) was dispatched to the facility.

Upon arrival, off-site migration of contaminated waste water via on-site drainage ditches was observed. Migration was occurring via the unmonitored/non-valved secondary containment around the northern above ground storage tank (AST) area. Evidence of off-site migration was observed around the deteriorated and structurally inadequate secondary containment around the central operations AST area as well as around the nonexistent secondary containment surrounding the pressure chamber treatment area. Based on the removal assessment, ERRS personnel were activated to initiate stabilization actions. START personnel documented the response.

Off-site sampling confirmed the existence of elevated levels of PAHs in Mill creek. This prompted ATSDR's recommendation to restrict access to the Site and Mill creek. Therefore, during the month of December, the EPA ERRB installed a fence around the perimeter of Mill Creek. Fencing was also installed around the access areas of the Site to restrict access.

2. Current Actions

The EPA ERRB is periodically monitoring the containment areas which is a concern due to the potential of heavy rains and possible run off of waste within the containment area.

C. State and Local Authorities' Role

1. State and Local Actions to Date

The city of Picayune has terminated water and gas service to WTI due to a delinquent balance of \$80,000.00. The State has assisted the EPA in its initial site assessment.

2. Potential for continued State/Local Response

No State or local agency has indicated a capability to fund the necessary removal actions.

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

A. Threats to Public Health or Welfare

The EPA Region 4 ERRB has determined that a release of a hazardous substance exists at the site, as defined by Section 101 of CERCLA and established under Section 102 of CERCLA at 40 CFR Part 302/Table #02.4. . The Site meets the requirements for initiating a removal action found in Section 300.415 of the NCP. Specifically, the Site meets the criteria for the threat to public health or welfare factors considered in the determination of the appropriateness of a removal action as specified in Section 300.415 (b)(2) of the NCP

Section 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. "

Uncontrolled releases of contaminated waste waters from the site, via drainage ditches, flow through an adjacent public park and residential area where children have access to potentially contaminated surface water and sediments. Off-site sampling has confirmed the existence of contaminants in Mill Creek, specifically 2,000 ppm benzo(a)pyrene; 2,900 ppm benzo(k)fluoranthene; and 38,000 ppb fluoranthene. Mill Creek flows through a heavily populated neighbor. The creek is easily accessible to the community where children have been observed playing. Elevated levels of PAHs found in Mill creek have prompted ATSDR's recommendation to restrict access to the Site and Mill creek. Mill creek empties into the Pearl River approximately seven miles downstream. Preliminary data does not indicate the presence of commercial fisheries in the Pearl River; however, recreational fishing and swimming are likely to occur.

Section 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"

Uncontrolled and unmonitored contaminated waste water in secondary containment areas with limited available freeboard exist. The non-containment areas surrounding ASTs as well as the leaking DOT highway transport tanker pose a threat of release. The oil/water separator an open-top AST, waste storage vats, pressure treatment chambers and the overflowing drums, buckets, and containers pose a threat of release. One of the tanks located on the Site contains approximately 30,000 gallons of creosote. The remaining two large tanks contain unknown amounts of creosote-contaminated wastewaters. A sample was collected from the material leaking from the tanks indicated elevated concentrations benzo(a)pyrene, benzo(b)fluoranthene, and benzo(a)anthracene.

Section 300.415 (b)(2)(iv): "High levels of hazardous substances or pollutants or contaminants in soils largely at the surface, that may migrate. "

The soil around the containment area is heavily stained with creosote tar and sludge. It has not been established whether the containment areas are lined on the bottom with concrete or soil. Elevated levels of benzo(a)pyrene [154 ppm], benzo(b)fluoranthene [240 - 359ppm], benzo(a)anthracene [498 - 575 ppm], and pentachlorophenol [227 - 1,185 ppm] have been detected in the soils and in the ditches on the Site.

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

All containment areas and storage tanks have limited available free-board space. Because of this, heavy rains pose a constant threat for possible off-site migration. EPA, along with the State of Mississippi have monitored the containment areas for possible future emergency removals if so deemed.

B. Threats to the Environment

The Site meets the requirements for initiating a removal action found in Section 300.415 of the NCP. Specifically, the Site meets the criteria for the threat to the environment considered in the determination of the appropriateness of a removal action as specified in Section 300.415 (b)(2) of the NCP

Section 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"

Uncontrolled and unmonitored contaminated waste water in secondary containment areas with limited available free-board exist which pose an extreme threat of release into Mill Creek as well as the public sewer system through migration off-site. The non-containment areas surrounding ASTs as well as the leaking DOT highway transport tanker pose a threat of release if the structures are compromised. The oil/water separator, an open-top AST, waste storage vats, pressure treatment chambers and overflowing drums, buckets, and containers pose a threat of release. One of the tanks located on site contains approximately 30,000 gallons of creosote. The remaining two large tanks contain unknown amounts of creosote-contaminated wastewaters.

Section 300.415 (b)(2)(iv): "High levels of hazardous substances or pollutants or contaminants in soils largely at the surface, that may migrate. "

The soil around the containment area is heavily stained with creosote tar and sludge. It has not been established whether the containment area is lined on the bottom with concrete or soil. Elevated levels of benzo(a)pyrene [154 ppm], benzo(b)fluoranthene [240 - 359ppm], benzo(a)anthracene [498 - 575 ppm], and pentachlorophenol [227 - 1,185 ppm] have been

detected in the soils on site and in the ditches on site as well. Off-site migration has already been documented through creek sediment samples collected which indicated high levels of PAHs. Continued migration of contamination will only compound the existing migration threat.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of the hazardous substances from this site, if not addressed by implementing the removal action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health or welfare or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

A significant threat to public health or welfare remains at the Picayune Wood Treating Site. Continued response actions are required to mitigate the ongoing release and threats of release as outlined in Section III of this document. These threats can be mitigated only by completion of the removal action outlined in the memorandum. Section 104(c) of CERCLA limits federal removal actions to \$2 million and 12 months unless the requirements of one of two exemptions in the statute are met. This Action Memorandum seeks exemption from the \$2 million and 12 month limitations based on the emergency exemption.

A. Emergency Exemption

1. There is an immediate risk to public health or welfare or the environment. The public and the environment are at immediate risk, and will continue to be at risk as long as the threats outlined in Section III of this document are not mitigated. There is an estimated 100,000 gallons or more of creosote and creosote contaminated waste water stored in tanks on the Site. Adverse weather conditions, specifically heavy rains, have already resulted in one emergency action and pose a threat for additional actions if the contaminant area and its sources are not eliminated. Off-site migration of contaminants into a nearby creek as well as documented heavy contaminated soil, sludge, and waste on-site along with large amounts of waste and waste water in the tanks all pose a constant immediate risk to the human health and welfare as well as the environment.
2. Continued response actions are immediately required to prevent, limit or mitigate an emergency. Continued response actions are immediately required to mitigate the release of waste water that accumulates with the containment areas of the tank farm. The structure of the containment area around the tank farm has been compromised. Waste water and sludge is migrated into the soil and ditch lines which provide a route for off-site migration and potential exposure. Contamination detected in Mill Creek provides a sound justification for the necessity of an immediate action.

Heavy rains threaten the already deficient containment structure. If not immediately addressed off-site migration and exposure will continue.

3. Assistance will not otherwise be provided on a timely basis. The State and Local Agencies do not have the financial and contractual resources necessary to conduct the removal activities required to mitigate the threats present at the Site. The attached Enforcement Addendum provides information regarding the PRP's and status of EPA's enforcement activities to date. The EPA Remedial program is currently conducting an investigation for future National Priorities Listing (NPL) recommendations.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

The emergency Action Memorandum provided only enough funding to minimally address the threats at the Site by allowing EPA to pump out a portion of the waste in the tanks and containment and secure/restrict site access.

1. Proposed Action Description - Proposed actions include the following: removal, treatment and disposal of creosote contaminated waste water; removal, treatment, and disposal of sludges and waste residues from tanks, containment, and process equipment; removal and disposal of hazardous substances in drums, cylinders, and lab containers; and excavation of contaminated soils and sediments exceeding removal action levels
2. Contribution to Remedial Performance - The Site is not currently on the NPL. The EPA Superfund Remedial Branch is evaluating the Site to determine if it meets the criteria necessary for NPL candidacy.
3. Description of Alternative Technologies - No alternate technologies have been identified for this Site. If alternate technologies, such as bio remediation, chemical oxidation, or thermal desorption, are determined to be an option for on-site treatment of creosote contaminated material, this Action Memorandum will be revised to describe the proposed technology.
4. Applicable or Relevant and Appropriate Requirements (ARARs)- Federal ARARs determined to be applicable to the activity at this Site are the Resource Conservation and Recovery Act (RCRA) regulations governing treatment, storage and disposal of hazardous waste and the Department of Transportation (DOT) requirements for hazardous waste transport.

5. EE/CA - This is a time critical removal not requiring an Engineering Evaluation/Cost Analysis.
6. Proposed Schedule - Response actions at the Site will be initiated upon approval of this Action Memorandum. Foregoing any unexpected delays, all removal actions are expected to be completed within one year of mobilization. On-site work is anticipated to take less than 120 days to complete.

B. Estimated Costs

<u>Extramural Costs</u>	<u>Current</u>	<u>Increase</u>	<u>Total</u>
Regional Allowance Cost			
ERRS	\$125,000	\$2,175,000	\$2,300,000
Non-Regional Allowance Cost			
START	\$ 30,000	\$ 270,000	\$ 300,000
USGC		\$ 100,000	\$ 100,000
Subtotal	\$155,000	\$2,545,000	\$2,700,000
20% Contingency	\$ 15,000 ³	\$ 509,000	\$ 524,000
Total, Extramural Cost	\$170,000	\$3,054,000	\$3,224,000
Intramural Cost			
Direct	\$ 10,000	\$ 100,000	\$ 110,000
Indirect	\$ 30,000	\$ 200,000	\$ 230,000
Total, Intramural	\$ 40,000	\$ 300,000	\$ 340,000
TOTAL SITE BUDGET	\$210,000	\$3,354,000	\$3,564,000

³ Contingency percentage use and based from in original Emergency Action Memorandum is undetermined.

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

If the planned removal action is significantly delayed or not taken, the risks posed to the public health or welfare and the environment will increase. Delayed action will increase the risk to public health and environment through additional releases of contaminants from the tanks, drums and other vessels on-site. Uncontrolled releases will continue to discharge onto site soils, migrate off-site, and expand the extent of contamination.

VIII. OUTSTANDING POLICY ISSUES

None

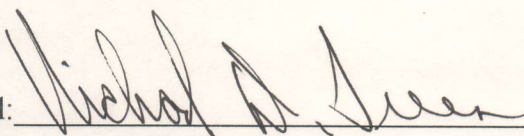
IX. ENFORCEMENT

See Enforcement Sensitive Information in Attachment I.

X. RECOMMENDATION

Because Site conditions continue to meet the NCP 300.415(b)(2) criteria for a removal and the CERCLA Section 104(c) emergency exemption, I recommend your approval of the proposed project ceiling increase and exemption from twelve (12) month and \$2 million limitations. The total project ceiling if approved will be \$ 3,564,000. Of this, an estimated \$3,224,000 comes from the Regional removal allowances. This decision document represents the selected removal action for the Picayune Wood Treating Site, in Picayune, 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.

Approval: _____

 Date: 10 MAR '00

Disapproval: _____ Date: _____

Richard D. Green, Director
Waste Management Division