U.S. ENVIRONMENTAL PROTECTION AGENCY
$250,000 EMERGENCY ACTION MEMO

Date: July 18, 2007

Subject: Kentucky Wood Preserving Site
Winchester, Clark County, Kentucky

From: Art Smith, On-Scene Coordinator (OSC), Region 4

To: Regional Response Center, 4WD-ERRB

I. PURPOSE

The purpose of this document to document the decision to initiate emergency response actions described herein for the Kentucky Wood Preserving Site, located in Winchester, Clark County, Kentucky under the OSC's $250,000 authority.

II. BACKGROUND

Site No: A4QP **Site Ceiling:** $250,000
Contractor: CMC, INC **D.O. No.**:
CERCLIS No: ERNS No:
Response Authority: CERCLA **NPL Status:** Non-NPL
State Notification: July 18, 2007 **Start Date**: July 18, 2007
Demobilization Date: NA **Completion Date**: NA

III. SITE INFORMATION

A. <u>Incident Category</u>: (check one)

___ Active Production Facility
__X_ Inactive Production Facility
___ Active Waste Management Facility
___ Inactive Waste Management Facility
___ Midnight Dump
___ Transportation Related
Other (specify): Private Residence

B. Site Location

1. Site description

a. Removal site evaluation

In November 2006, EPA was notified of this site via an NRC report indicating a potential release of hazardous substances at the Kentucky Wood Preserving facility in Winchester, KY. The facility was reported to have ceased operations in October 2006, and that wood treating chemicals abandoned onsite may pose a potential threat of a release. The company used Copper Chromated Arsenate (CCA) wood preservatives, and the treatment works were reported to be full of CCA solution at the time that the business ceased to operate. Based on this information, EPA OSC Smith initiated a Removal Site Evaluation (RSE) under Section 300.410 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

On 04/10/07, EPA OSC Smith and KDEP Superfund Branch staff conducted a removal site inspection. At the drip pad area, KDEP collected a sample of liquids from the containment sump beneath the primary treatment cylinder. The liquid level in the sump was observed to be within 1 foot where the sump would overflow. On the drip pad and adjacent to the treatment building itself, eight 55-gallon drums were present, five of which were in a gated enclosure. Of the three remaining drums which are unsecured, two appeared to be full and were labeled as F035 hazardous waste.

The former treatment area was inspected, where 2 additional pressure cylinders were found. Staining of soils beneath the cylinders was a greenish yellow color, indicating conatmination with CCA constituents. An above-ground storage tank used to collect condensate from the cylinders was discovered to be about one-half full of an unknown liquid substance.

During the site inspection, KDEP utilized an x-ray fluorescence (XRF) instrument to evaluate for metals in surface soils. All measurements were found to be elevated for arsenic and chromium at levels exceeding recognized values for natural background conditions in the local area. Maximum concentrations detected via the XRF instrument were approximately 200 parts per million (ppm) for arsenic and 375 ppm for chromium.

Prior to leaving the site, inspection of an unlocked storage trailer onsite disclosed the presence of small containers of cleaning solvents and photographic development chemicals, which were suspected to contain hazardous substances.

After the site inspection, KDEP reported to EPA the following information:
- Analytical results for wastewater samples collected from tanks and containment at the site revealed arsenic and chromium at maximum levels of 67 and 152 milligrams per liter (mg/l), respectively. These tanks are currently holding approximately 40,000 gallons and will spill unless action is taken to mitigate an overflow.
- Volume calculations for process tanks in the treatment building indicate that an additional 30,000 to 40,000 gallons of CCA product are also stored onsite and that these tanks are full.

b. Physical Location and Site Characteristics

The Site is located at 200 Magnolia Street in Winchester, Clark County, KY. The site is in a mixed commercial/residential area. Approximately 60 homes and 5 businesses are within 3 blocks of the site.

The site consists of a treatment building and drip pad for the former wood preserving operation. There are 4 abandoned treatment cylinders, and also several outbuildings, including a shop and offices. A significant quantity of untreated wood poles and posts are strewn across the site, along with numerous piles of wood mulch, and other debris.

Surface drainage at the site is to the south, and stormwater runoff exits the site through a culvert passing beneath a railroad spur forming the southern boundary of the property.

On 06/12/07, KDEP visited the site and discovered that vandals had broken into the treatment building and pried open the door of the pressure cylinder. KDEP also related that they had spoken to a nearby resident, who had expressed concerns about trespassing to the local police.

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

CCA constituents are arsenic pentoxide, chromic acid, and cupric oxide. During the RSE, arsenic and chromium were detected in surface soils and process wastewaters. 2 drums of solid waste were labeled as F035 hazardous waste.

Arsenic, chromium, and F035 hazardous wastes are “hazardous substances” as that term is defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

d. Maps, pictures, and other graphic representations

Maps and other graphic representations in the Site File are found at www.epaosc.net/kywood.

2. Description of threat

Explanations of how this release or threat of release meets the criteria for threats to public health or welfare or the environment in section 300.415 (b)(2) of the NCP are discussed below:

a. 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"; Exposure to inorganic 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, damage

to blood vessels, and a sensation of “pins and needles” in hands and feet. Ingestion and or breathing 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. Due to the lack of controls on access to the site and the documented trespassing incidents, there is an immediate threat of actual or potential exposure via direct contact to inorganic arsenic.

b. 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"; CCA product solutions and wastewaters are stored in an abandoned condition, and may be released due to deterioration of the containers, or through or acts of vandalism.

c. Section 300.415(b)(2)(v) "Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released"; high intensity short duration rainfall events will eventually cause an overflow of F035 wastewaters into the environment.

d. Section 300.415(b)(2)(vii) "The availability of other appropriate federal or state response mechanisms to respond to the release"; KDEP referred the site to EPA for action on 06/15/07, citing an an inability to fund the removal action.

IV. SCOPE OF WORK

With the emergency funding, the OSC proposes to mitigate the immediate threats posed by the uncontrolled release of hazardous substances at the Site. The initial phase of the removal action consists of the following activities:

1) Develop a Site Health and Safety Plan
2) Secure the site to deter trespassers from entering the premises.
3) Obtain soil and stormwater samples and arrange for laboratory analytical services.
4) Obtain samples from CCA process tanks and sumps; profile wastestreams for treatment/disposal or recycling/reuse by other legitimate business entities.
5) Conduct on-site treatment and/or arrange for off-site transportation disposal/treatment /recycling of hazardous substances.
6) Remove wood products and debris from the site.
7) Demobilize equipment and personnel upon direction by the OSC.

V. COSTS

Extramural Costs:	**Project Ceiling**
ERRS (CMC, Inc.)	$ 200,000
START (TN & A))	$ 50,000

TOTAL PROJECT CEILING/SITE COST $ 250,000

The Project Ceiling has been approved by the OSC as documented in this Action Memo. The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor. Other financial data, which the OSC must rely upon, may not be entirely up to date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

Disposal analysis will be conducted on waste as appropriate in order to identify potential disposal options.

VII. 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, present an imminent and substantial endangerment to public health, welfare, or the environment.

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

A delay in action or no action at this Site would increase the actual or potential threats to the public and the environment.

IX. OUTSTANDING POLICY ISSUES

At the present time, there are no potentially responsible parties (PRPs) identified who are financially capable of performing the immediate response actions. EPA continues to collect additional information on past owners and operators of the site, and will take appropriate steps to ensure PRP participation, where applicable.

X. APPROVAL

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan. This decision is based on the administrative record for the site.

Conditions at the site meet the NCP section 300.415(b)(2) criteria for a removal and through this document, I am approving the proposed removal actions. The total project ceiling is $250,000, of which an estimated $200,000 will be funded from the Regional removal allowance.

Art Smith

Digitally signed by Art Smith
DN: cn=Art Smith, c=US, o=EPA Region 4, ou=ERRB, email=smith.art@epa.gov
Reason: I attest to the accuracy and integrity of this document
Date: 2007.07.27 16:22:06 -04'00'

Art Smith, OSC Date