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**ARKWOOD, INC. SUPERFUND SITE
OMAHA, ARKANSAS**

EXPLANATION OF SIGNIFICANT DIFFERENCES (ESD)

INTRODUCTION

The Arkwood, Inc. Superfund Site ("Arkwood Site" or the "Site") is located west of U.S. Highway 65, one-half mile southwest of Omaha, Boone County, Arkansas. The Record of Decision ("ROD") for the Site was finalized on September 28, 1990. The Consent Decree ("CD") for implementation of the remedy specified in the ROD was entered by the Court on September 25, 1992 to allow Mass Merchandisers, Inc. ("MMI"), formerly known as McKesson Services and currently known as Millbrook Distribution Services ("Millbrook"), to implement the remedy.

The Environmental Protection Agency ("EPA") is the lead agency conducting oversight of the remedy implementation. The Arkansas Department of Pollution Control and Ecology ("ADPC&E") is the support agency for oversight activities.

This ESD is prepared in fulfillment of EPA's public participation responsibilities under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), as amended, 42 U.S.C. § 9617(c), which provides that after adoption of a final remedial action plan, if any remedial action is taken, settlement or consent decree under Section 106 or Section 122 is entered into, and if such action, settlement, or decree differs in any significant respects from the final plan, the President or the State shall publish an explanation of significant differences and the reasons such changes were made, 42 U.S.C. § 9617(c). Moreover, pursuant to the National Contingency Plan ("NCP"), 40 C.F.R. Part 300, EPA is required to publish an ESD when, after adoption of the ROD, the remedial action or enforcement action taken, or the settlement or consent decree entered into, differs significantly from the remedy selected in the ROD with respect to scope, performance, or cost. 40 C.F.R. § 300.435(c)(2)(i).

The 1990 ROD specified onsite incineration as the final treatment step for sludges and affected soils. Due to a significant reduction in the volume of affected soils actually being recovered during the first phase of the remedial action, off-site incineration at a commercial facility would save time and resources in completing the last phase of the remedial action.

This ESD will become part of the Administrative Record ("AR") File for the Arkwood Site, pursuant to the requirements of 40 C.F.R. § 300.825(a)(2). The AR File for the Arkwood Site is a record of all the information that EPA relied upon to select the remedy for the Site. The AR File is available for public review at the following locations:

1) EPA Region 6 Library
1400 Ross Avenue
Dallas, Texas 75202
Visitor Hours: 8:00am - 4:30pm, M-F
Phone: (214) 665-6424

2) ADPC&E
9001 National Parkway
Little Rock, Arkansas 72219-8913
Visitor Hours: 8:00am - 4:30pm, M-F
Phone (501) 562-7444

3) Local Informational Repositories

Boone County Library
221 W Stephenson Ave
Harrison, Arkansas 72601
Hours: 9:00am - 5:00pm, M, W, F, S;
9:00am - 7:00pm, Th
Phone: (501) 741-5913

Boone County Court House
County Clerk's Office
101 North Main
Harrison, Arkansas 72601
Visitor Hours: 8:00am - 4:00pm, M-F
Phone: (501) 741-8428

SITE HISTORY, CONTAMINATION PROBLEMS, AND SELECTED REMEDY

The 15 acre Arkwood Site is located in an excavated area about 1,000 feet west of U.S. Highway 65, north of Cricket Road. The Site consisted of a millwork shop, a wood-treating plant that used creosote and pentachlorophenol ("PCP") in its process, and a yard for storing treated wood products prior to sale.

The plant site was developed in the 1950's when a railroad company excavated about 40 to 50 feet below natural grade to obtain fill dirt for constructing a railroad embankment. Arkwood, Inc., began wood-treating operations at the Site in the early 1960's. In 1973, the site owner leased the wood-treating facility to MMI. The facility continued to operate until June 1984, at which time MMI sold or removed its inventory and process materials. In January 1985, MMI's lease expired and was not renewed. The owner dismantled the plant in 1986.

During its 20-plus years of operation, the plant generated an estimated 6,000 to 7,000 pounds of waste per year. Wastes from plant operations were reportedly dumped into a sinkhole at the treatment plant from the beginning of operations until 1970. The sinkhole was later sealed. In addition, waste oils were placed in a ditch adjacent to the railroad until approximately 1974, when MMI began using a chemical recovery system. Other wastes included liquids used to wash the treatment plant floor and equipment. These waste liquids were accumulated in a tank and then spread over the wood storage yard to control dust.

ADPC&E initially received a complaint about the Site in 1981. Preliminary investigations revealed detectable levels of PCP in area groundwater. In 1985, EPA proposed that the Site be added to the National Priorities List ("NPL"). The Site was formally added to the NPL on March 31, 1989. With EPA oversight, MMI conducted a Remedial Investigation and Feasibility Study (RI/FS) to determine the nature and extent of contamination and to investigate possible remedies for the Site. A ROD was finalized using information from the RI/FS on September 28, 1990.

The 1990 ROD documented that the principle threat from the Site was direct contact with soils contaminated above health based levels. In addition, the 1990 ROD stated that these soils posed a long term threat to groundwater. The low level threat from the Site was identified as direct contact with soils contaminated below health based levels and direct

contact with New Cricket Spring. New Cricket Spring contained PCP above Arkansas Water Quality Standards.

The 1990 ROD specified that all sludges and affected soils would be excavated, pre-treated onsite, and then incinerated onsite. Affected soils were defined as those soils containing contaminants greater than the clean up goals. Clean up goals included the following: 300 mg/kg PCP, 6 mg/kg benzo-(a)-pyrene equivalents (BAPE), and 20 ug/kg tetrachlorodibenzo-p-dioxin equivalents (TCDD).

The pre-treatment step was anticipated to produce a "coarse" soils fraction separate from soil "fines". The 1990 ROD provided that the coarse material be tested and if clean up goals were met, the material could be backfilled onsite. The 1990 ROD stipulated that those coarse materials not meeting the clean up goals would be incinerated along with the fines. Based upon information generated in the RI/FS, the 1990 ROD estimated that affected soils totaled about 20,000 cubic yards to an approximate depth of one to two feet on the main area of the Site, and four to five feet in the railroad ditch area. The 1990 ROD estimated that sludges in the railroad ditch area and material in the sinkhole totaled 425 cubic yards.

On April 8, 1991, EPA and MMI signed an agreement, whereby MMI would design and implement the remedy selected in the 1990 ROD. This agreement, the CD, contained a detailed Scope of Work ("SOW") for all remedial activities. The CD was entered by the Court, following a public comment period, on September 25, 1992.

In order to optimize the design as well as the implementation of the soils remedy, the Remedial Design (RD) and Remedial Action (RA) activities outlined in the CD are being completed in two phases. The CD SOW outlined the initial consideration of a phased approach, to be determined during the preliminary design (SOW, Section II(A)(21), p. 17). EPA correspondence with McKesson Services dated November 16, 1993 approved a specific phased approach and detailed the split of remedial activities for each of 2 phases. EPA issued a fact sheet to describe the approved phased approach on May 6, 1994. EPA's November letter and May fact sheet will also be made part of the AR File for the Arkwood Site.

The phased approach allowed remedial activities to be started one year ahead of the original RD/RA schedule provided in the CD. The Phase I RD is complete and included excavation, pre-treatment, and temporary storage onsite. The Phase I RA was initiated in the spring of 1994 and will be completed in the summer of 1995. The Phase II RD is currently underway and will include off-site incineration and site closure activities. The Phase II RA will not commence until the RD is complete and all plans are approved by EPA.

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SIGNIFICANT DIFFERENCE FROM SELECTED REMEDY

The 1990 ROD for the Arkwood Site encompassed both a soils remedy and a groundwater remedy. This ESD only changes one component of the soils remedy. In consideration of the volume reduction anticipated from the pre-treatment step, the 1990 ROD estimated that only 7,000 cubic yards of material would need to be incinerated onsite over approximately a 140 days period (assuming a 50 cubic yards/day incinerator capacity). As the Phase I RA approaches completion, Millbrook estimates that only 3,000 to 3,500 cubic yards of material will need to be incinerated. This decreased volume estimate is due in part to the pre-treatment step and in part to the additional pre-design sampling conducted during the RD to refine the horizontal and vertical extent of affected soil areas.

Therefore, rather than complete the Phase II RD for an onsite incinerator, off-site incineration has been selected for completing the RA. This change in the remedy is due to the substantial decrease in volume of material to be incinerated. The remedy will be improved since the soils remedy will be completed at least 1 and 1/2 years ahead of schedule without fundamentally altering the RA outlined in the ROD. In addition, the groundwater remedy will be initiated earlier than currently scheduled in the CD.

Although cost estimates for this change are not substantially different from original remedy cost estimates, time for implementation and actual utilization of resources is much more effective than for the original remedy. For example:

- 1) design of an onsite incinerator is considerably more complex than the design for off-site shipment of a small volume of material to be handled at a commercial facility;
- 2) testing and shakedown of equipment and agency review via the official trial burn can be time consuming for any volume of material, and therefore is not as cost effective for a small scale project as for a larger volume project; and
- 3) the establishment of operating parameters via agency review of trial burn results is time consuming and complex given the evolving risk assessment procedures and policy initiatives which must be considered for Superfund incinerator projects--commercial facilities must meet operating specifications which are already outlined in the facility's permit.

Applicable or Relevant and Appropriate Requirements (ARARs) are still met for onsite activities. All current applicable federal and state regulations will be met for the transport and destruction of affected material at a commercial facility. The commercial facility which is selected to receive material will be selected in accordance with EPA's Off-Site Policy. 40 C.F.R. § 300.440 (1990).

TABLE 1 COMPARISON OF ORIGINAL REMEDY VS MODIFIED REMEDY	
ORIGINAL REMEDY ONSITE INCINERATION	MODIFIED REMEDY OFF-SITE INCINERATION
<p>Construct onsite incinerator to handle a minimum of 7,000 cubic yards of material.</p>	<p>Transport of sludges and soils totaling 3,500 cubic yards to commercial facility for incineration.</p>
<p>Timeframe for onsite incineration, not including design, was estimated at 140 days. This RA timeframe does not include typical testing, trial burn activities, regulatory review of results and operating parameters set, etc. A current timeline for remedy implementation would be trial burn completed in 1996; incineration complete and equipment removal in the fall of 1997.</p>	<p>Phase I, partially completed the fall of 1994, is scheduled for completion the summer of 1995. Phase II will be initiated upon completion of Phase I and EPA approval of Phase II design documents. Implementation of Phase II is estimated at 3 months. Therefore, the Soils RA will be ahead of schedule by possibly 2 years.</p>
<p>Estimated costs for the entire remedy was \$10.3 million.</p>	<p>New estimated cost for the entire remedy, utilizing off-site incineration is \$9.8 million; this includes current actual expenditures.</p>

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SUPPORT AGENCY COMMENTS

ADPC&E concurs with this significant change to a component of the original remedy, as evidenced by the attached letter dated May 1, 1995.

AFFIRMATION OF THE STATUTORY DETERMINATIONS

Considering the new information that has been developed and the one change that has been made to the selected remedy, EPA and ADPC&E believe that the remedy remains protective of human health and the environment, complies with federal and state requirements that were identified in the ROD as applicable or relevant and appropriate to this remedial action at the time the 1990 ROD was signed, and is cost effective. In addition, all current applicable regulations will be met by the commercial facility at the time of disposal for off-site incineration of affected material. The revised remedy still utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for the Site.

PUBLIC PARTICIPATION ACTIVITIES

Public notice for this ESD will be issued in the newspaper record, the Harrison Times, upon signature by the Regional Administrator. The Administrative Record File is available for public review at the informational repositories identified earlier in this ESD. EPA will hold a community Open House to discuss this ESD and any community concerns from 6:00 to 8:00 p.m. on July 13, 1995 at the Omaha Public School.

for W.B. Hathaway
Jane N. Saginaw
Regional Administrator

6/14/95
Date