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**Addendum to
Site Investigation Work Plan
Former Gulf States Creosoting Site
Hattiesburg, Mississippi**

February 23, 1998

Project No. 21-04

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Former Gulf States Creosoting Site
Hattiesburg, Mississippi

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Addendum to Site Investigation Work Plan

Former Gulf States Creosoting Site Hattiesburg, Mississippi

Summary

Kerr-McGee Chemical Corporation (KMCC) submitted a *Site Investigation Work Plan* to MDEQ for review on January 8, 1997. In a letter dated February 21, 1997, MDEQ approved the work plan for implementation. RI field activities were conducted between February 24 and April 30, 1997. The findings of the investigation were presented in the *Remedial Investigation Report* dated June 30, 1997.

MDEQ comments on the *Remedial Investigation Report* were transmitted to KMCC's legal counsel in a letter dated January 13, 1998. In its comment #7, MDEQ requested the submittal of a remedial investigation work plan sufficient to establish the horizontal and vertical extent of affected soil and ground water at the site. This work plan addendum presents activities proposed by KMCC to accomplish this goal.

1.0 Introduction

1.1 Objectives of Investigation

The objectives of additional site investigation activities include the following:

1. Delineate the vertical and horizontal extent of creosote-impacted soils to the north and east of the Process Area;
2. Delineate the vertical extent of creosote-impacted surface soils;
3. Determine the geometry of the sand channel to the north and east of the Process Area;
4. Determine the lateral extent of creosote-impacted ground water within the sand channel to the north and east of the Process Area;
5. Determine ground water quality within the Fill Area sands; and
6. Determine appropriate locations and depths for additional ground water monitoring wells.

1.2 Work Plan Addendum Organization

The original *Site Investigation Work Plan* and its appendices presented extensive site background information (Sections 2.0 through 4.0) and detailed procedures for data collection, quality assurance and quality control (QA/QC), health and safety, and planning and reporting activities (Sections 5.0 through 9.0). In order to avoid duplication and reduce the volume of paperwork generated, this addendum incorporates the background information and procedures from the original work plan by reference. This addendum, therefore, consists of the proposed scope of work for additional activities and presents only those procedures not detailed in the original plan.

The work plan addendum includes the following sections:

- 1.0 Introduction
- 2.0 Soils Investigations
- 3.0 Stratigraphic Characterization
- 4.0 Ground Water Investigations
- 5.0 Data Evaluation and Future Activities

1.3 Access to Sampling Locations

KMCC does not own or control any of the properties where samples are proposed to be collected. KMCC will use its best efforts to obtain access to the properties where samples are to be collected from those persons or entities who own or control the properties. If KMCC is unsuccessful, it may seek assistance from MDEQ and/or the courts to gain access to the properties.

2.0 Soils Investigations

2.1 Process Area

During 1997 RI activities, the Rapid Optical Screening Tool (ROST) system was utilized to delineate the extent of creosote-impacted soils within the Process Area and Gordon's Creek Fill Area. Correlation soil samples were collected and analyzed at a fixed-base laboratory to corroborate the results of ROST testing. The ROST system was demonstrated to be an effective screening tool for the delineation of the vertical and lateral extent of creosote-impacted soils. ROST results were correlated with laboratory analytical data to allow for the determination of the presence/absence and relative concentrations of creosote.

The results of the 1997 RI indicated that creosote-impacted soils within the Process Area are confined to areas beneath or immediately adjacent to former wood treating operational features. The extent of creosote-impacted soils to the southwest and northwest of the Process Area was well defined. Creosote-impacted soils were, however, detected at the southeastern edge (i.e., the fenceline between Courtesy Ford and the N.O. & N.E. Railroad right-of-way) and northeastern edge (i.e., along the southwestern side of Scooba Street) of the Process Area (see Figure 2-1 for current site features). KMCC will conduct additional soils investigations to determine the extent of impacted soils within these areas.

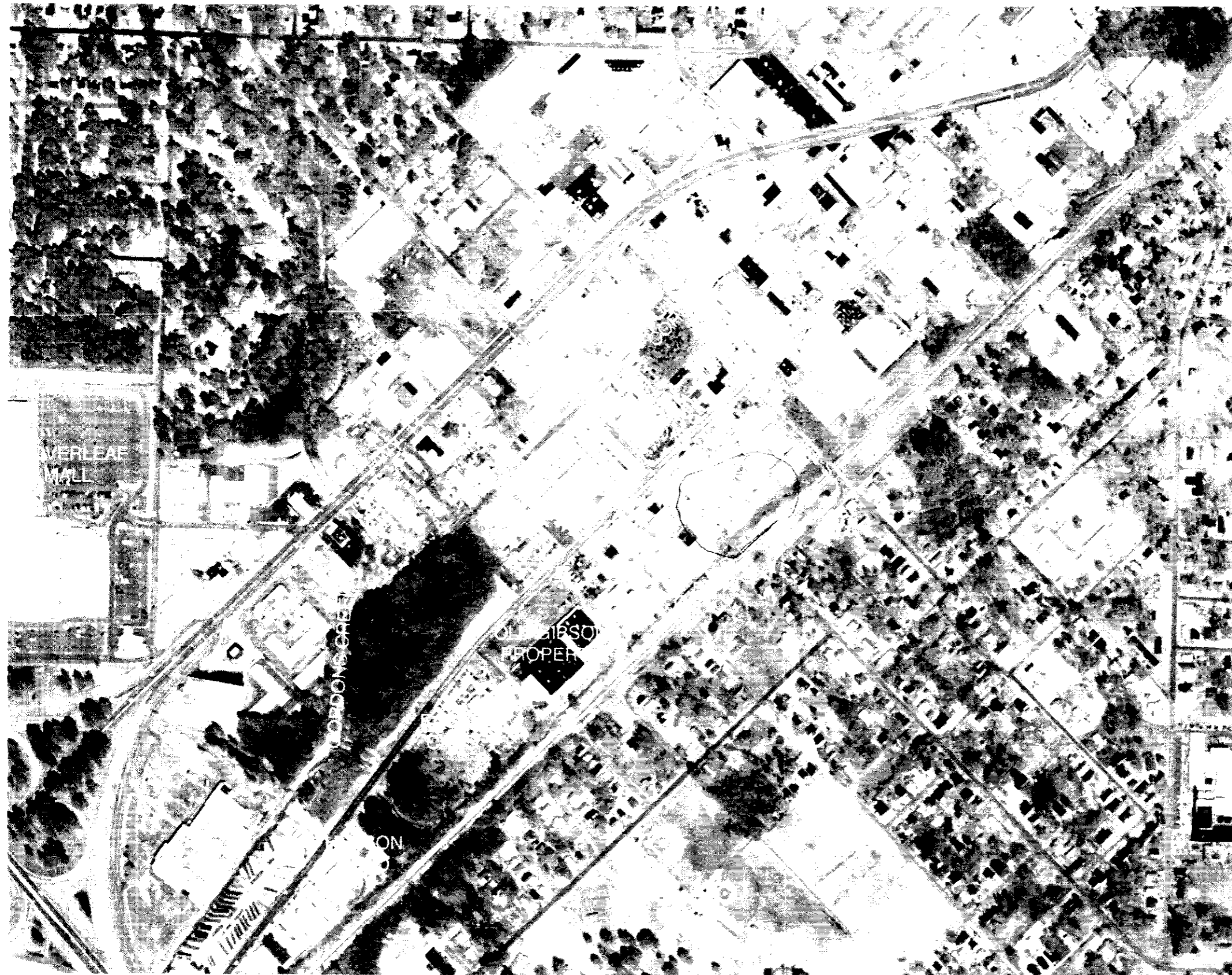
Figure 2-2 depicts proposed additional soil sampling locations. As surface soil samples collected during the 1997 RI were designated SS-01 through SS-18, new sample locations were numbered beginning with 19. At locations 19 through 23, KMCC will advance Geoprobe borings to depths of 10 feet below grade. Soil samples will be collected from the zero to 2-, 4- to 6-, and 8- to 10-foot intervals, and will be analyzed for Target Compound List semivolatile organic compounds (TCL SVOCs). Should field evidence of contamination (e.g., staining or odors) be present, samples may be collected at additional locations and/or depths to further delineate the extent of creosote-impacted soils.

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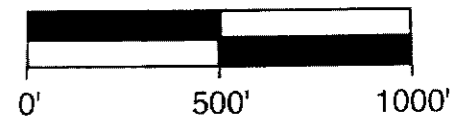
2.2 Former Wood Storage Areas

During 1997 RI activities, surface soil samples (i.e., samples from the zero to 12-inch interval) were collected from unpaved areas and analyzed to determine the presence/absence of creosote constituents in near surface soils. A total of 18 surface soil samples were collected on a grid pattern at a frequency of approximately one per each 40,000 square feet of exposed area. Samples were analyzed for TCL SVOCs.

Low concentrations of polynuclear aromatic hydrocarbons (PAHs) were reported in all but two of the 18 surface soil samples collected during the RI. The low concentrations observed were typical of those found in areas historically used for treated wood storage. Generally, constituents in these areas are confined to the uppermost two feet of soil. KMCC will collect samples from deeper intervals to determine the vertical extent of impacted soils.



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TITLE	FIGURE 2-1 CURRENT SITE FEATURES
PROJECT	FORMER GULF STATES CREOSOTING SITE
LOCATION	HATTIESBURG, MISSISSIPPI
SCALE	DWG NO.