ATTACHMENT NOT INCLUDED

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

UNITED STATES OF AMERICA, PLAINTIFF, v. ANDERSON, GREENWOOD & COMPANY ET AL., DEFENDANTS.	CIVIL ACTION NO. H-91-_____ H-91-3523

CONSENT DECREE

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SHERIDAN SITE CONSENT DECREE

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ATTACHMENT G - CONCURRENCE OF THE SECRETARY OF THE INTERIOR OR HIS DELEGEE

responsibility by Settlors, and without the Decree being admissible as evidence in any proceeding except in a proceeding to enforce the terms of this Decree or as otherwise specifically provided in this Decree, it is hereby ORDERED, ADJUDGED, AND DECREED THAT:

I. JURISDICTION

The Court has jurisdiction over this matter and the Parties. The Parties agree not to contest the jurisdiction of the Court to enter this Decree or in any subsequent action by the Parties to enforce, modify, or terminate it. The Complaint states a cause of action upon which, if the allegations were proven, relief can be granted.

II. PARTIES

The parties to this Decree are the United States of America on behalf of the United States Environmental Protection Agency and the Settlors.

III. STATEMENT OF PURPOSE

The purpose of this Decree is to: (a) protect human health and the environment from the release or threatened release of hazardous substances at or from the Site; (b) fund and implement the Remedial Action; (c) remedy natural resource damage at the Site; and (d) resolve the claims by the United States against the Settlors.

IV. SITE HISTORY

Sheridan Disposal Services, Inc. operated a commercial waste disposal facility at what is now known as the Sheridan Site from about 1958 to 1984. A wide variety of hazardous substances, including organic and inorganic chemicals and solid wastes were disposed of at the Site. The facility treated waste by steam distillation, open burning and incineration. A lagoon or pond area was developed in a low-lying area of the Site that was used as a holding pond and for disposal of overflow wastes and waste treatment residues. In 1976, the facility initiated use of an evaporation system for disposal of water accumulated in the pond area.

The Sheridan Site was proposed for listing on the National Priorities List in June 1986. At that time a group of companies identified by the EPA as potentially responsible parties had already formed the Sheridan Site Committee and were working cooperatively with the State in investigating site conditions and possible remedial alternatives. Those activities were continued under a formal administrative order on consent which was entered in February 1987. Pursuant to that order, the Sheridan Site Committee performed, with EPA oversight, both a source control and a ground water remedial investigation and feasibility study to investigate existing conditions at the

Site and to evaluate possible remedial alternatives. This Decree addresses the Source Control Operable Unit only; it does not address the Ground Water Operable Unit. Any injunctive relief and any recovery of response costs for the Ground Water Operable Unit shall be pursued separately and apart from any actions related to this Decree and the Source Control Operable Unit.

The remedial investigation included a study of site conditions, both surface and subsurface. Extensive field work was performed with EPA oversight. Sample and laboratory analyses of site materials were carried out in EPA approved laboratories.

During performance of those studies, a community relations plan was implemented to advise the community of the status of activities at the Site through newsletters, public meetings and maintenance of public document repositories.

The final remedial investigation for the Source Control Operable Unit was issued in July 1988. The final feasibility study along with a baseline risk assessment was completed and placed in the public repositories in November 1988.

In November, 1988, EPA announced that these studies were completed and that public comments were being accepted on the range of alternatives for the Source Control

Operable Unit discussed in the feasibility study. EPA's public notice stated its preference for the biological treatment remedial alternative. On November 22, 1988, a public meeting was held at the Waller County Courthouse. Approximately 40 people attended. Additional persons responded to the studies by filing written comments.

On December 29, 1988, the Record of Decision ("ROD") for the Source Control Operable Unit was issued for the Sheridan Site. The ROD selected the biological treatment alternative.

V. BINDING EFFECT

This Decree applies to and is binding upon the Parties, and their parents, successors, and assigns. Any change in ownership or corporate status of a Settlor shall in no way alter such Settlor's obligations under this Decree. The Settlors shall provide a copy of this Decree, as entered, with all appropriate and relevant attachments and appendices, to each person, including all contractors and subcontractors, retained to perform the work contemplated herein and shall condition any contract for performance of all or any part of the Remedial Action on compliance with this Decree. The Settlors and those persons in active concert or participation with them who receive actual notice of this Decree agree not to interfere with or impede the implementation of this Decree.

VI. DEFINITIONS

The principal terms used herein are defined as follows:

Attachment A: Record of Decision.

Attachment B: Statement of Work.

Attachment C: List of Settlors.

Attachment D: List of De Minimis Settlors.

Attachment E: Sheridan Site Legal Description.

Attachment F: Department of the Interior Wetland Habitat Mitigation Plan.

Attachment G: Concurrence of the Secretary of the Interior or His Delegee.

CERCLA: The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613 (1986).

Certification of Completion: The certification provided by EPA pursuant to Section 122 of CERCLA upon approval of the Site Remediation Report that will be submitted following the demobilization phase and prior to the completion of the MOM.

Contaminants: Any solid waste, hazardous waste, hazardous substance, pollutant, chemical, or radioactive material as defined at 42 U.S.C. § 9601(33).

Contractor: The company or companies retained on behalf of the Settlors to undertake and complete the Remedial Action.

Costs: All oversight, administrative, enforcement, and response costs, direct or indirect, incurred or to be incurred by the United States, EPA and DOI relative to Source Control activities at the Site.

De Minimis Settlors: Those persons specified in Attachment D.

Demobilization: The phase of the Remedial Action during which the equipment used for Site Remediation is dismantled, decontaminated, and removed from the Site.

DOJ: United States Department of Justice.

EPA: The United States Environmental Protection Agency.

Future Liability: Any and all civil liability or other civil obligation under CERCLA Sections 106 and 107 that arises after the Certification of Completion with regard to the Source Control Operable Unit at the Site.

Initiation of Work: The beginning of work on each phase of The Remedial Action as defined in the schedule

and/or work plan governing that phase of the work to be performed.

Monitoring, Operation and Maintenance (MOM): That portion of the Remedial Action that occurs after completion of the Site Remediation Phase, and that requires continued performance of activities at the Site, as necessary, to ensure that the remedy functions as designed. Subject to Sections XXI.C. and D of the Covenant Not to Sue and the Further Action provisions of Section VIII.I, the MOM Phase is not intended to nor should it amend, modify or revise the Site Remediation.

NCP: The National Oil and Hazardous Substance Pollution Contingency Plan, 40 C.F.R. Part 300, as amended.

NPL: The National Priorities List, 40 C.F.R. Part 300, App. B.

Oversight: The United States' inspection of remedial work and verification of adequacy of performance of activities and reports of the Settlors as required under the terms of this Decree, directly or through its representatives, including any necessary support work.

Owner-Settlor: One or more Settlors who are the owners of the site.

Parties: The United States and the Settlors.

Project Coordinator: As to EPA, the individual designated to oversee implementation of this Decree and to

coordinate communications with the Settlors; and as to the Settlors, the individual authorized to act on their behalf to ensure performance of the Remedial Action in compliance with this Decree.

RAS, CLP: Routine Analytical Services, Contract Laboratory Program, as set forth in EPA's Users Guide to the Contract Laboratory Program, OSWER No. 9240.0-1 (Dec. 1988).

Record of Decision or ROD: The document signed by the EPA Region VI Regional Administrator on December 29, 1988, which describes the Remedial Action to be conducted at the Site for the Source Control Operable Unit. (Attachment A hereto).

Remedial Action: The implementation, in accordance with this Decree, of the remedy selected by EPA for the Site Source Control Operable Unit as described in the ROD.

Remedial Design: The phase of the Remedial Action in which engineering plans and technical specifications are developed for implementation of the Remedial Action.

RI/FS: The Remedial Investigation and Feasibility Study formally approved by EPA.

SAS, CLP: Special Analytical Services, Contract Laboratory Program, as set forth in EPA's Users Guide to the Contract Laboratory Program, OSWER No. 9240.0-1 (Dec. 1988).

Settlors: Those defendants named in the Complaint who are signatories to this Decree (listed in Attachment C hereto), their parents, subsidiaries, successors and assigns.

Sheridan Site or Site: A "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9), that has been listed on the NPL and more particularly described in Attachment E to this Consent Decree.

Sheridan Site Trust Fund: The fund managed by the Trustee(s) into which the Settlors shall contribute in order to fund the Remedial Action.

Site Remediation: The phase of the Remedial Action for the Source Control Operable Unit in which the action set forth in the ROD, the SOW and the Remedial Design, including the treatment of waste by biotreatment and stabilization, construction of a cap and/or liner, wastewater treatment, and construction of an erosion control device, takes place at the Site.

Site Representative: As to EPA, those persons confirmed by the EPA Project Coordinator as authorized to conduct oversight activities pursuant to this Decree; and as to Settlors, those contractors and subcontractors hired in connection with the Remedial Action.

Source Control Operable Unit : That portion of the response activity at the site which addresses risks

associated with exposure to on-site waste and addresses the sources of contamination to ground water by treating on-site waste and soils; the second operable unit will address ground water.

State: The State of Texas.

Statement of Work or SOW: The Statement of Work including attachments (Attachment B hereto) which sets forth the general plan for carrying out the Remedial Action.

Superfund: The Hazardous Substances Superfund, 42 U.S.C. § 9631(a).

VII. OBLIGATIONS FOR THE REMEDIAL ACTION

A. The Settlors shall finance and perform the Remedial Action described in the ROD in accordance with the NCP and with the standards, specifications, and schedule of completion set forth in or approved by EPA pursuant to Section VIII, herein. In addition, the Settlors shall finance and perform the Wetland Habitat Mitigation Plan set forth in Attachment F, in accordance with the schedules therein. All actions taken by the Settlors which are in accordance with this Decree shall, upon approval of EPA, be deemed to be consistent with the NCP.

B. Pursuant to section 122(d) of CERCLA, all actions undertaken by the Settlors pursuant to this Decree shall be undertaken in accordance with the requirements of all "applicable" or "relevant and appropriate" state and federal

laws and regulations that are specified in the ROD. Pursuant to CERCLA and the NCP, no federal, state or local permits are necessary for the onsite work conducted pursuant to the ROD. The United States has determined that the obligations and procedures authorized under this Decree are consistent with its authority under applicable law.

C. In the event EPA determines that the Settlors have failed to implement the Remedial Action in accordance with this Decree, the EPA may perform the remainder or any phase of the Remedial Action. Prior to such performance, the EPA will provide the Settlors with thirty (30) days advance notice of its intent to do so and the basis for its determination. If the Settlors disagree with the EPA's determination, the Settlors must, within thirty (30) days of the notice, invoke the Dispute Resolution provisions of this Decree. Following resolution of any dispute under this Section, if the EPA is successful and assumes performance of the remainder or any phase of the Remedial Action, any liability of the Settlors for stipulated penalties arising from the acts or omissions that prompted the EPA's performance of Remedial Action shall continue to accrue for a maximum of thirty (30) days from the date of receipt of EPA's notice of intent to perform the remainder or any phase of the Remedial Action. In consideration for the cessation of stipulated penalty accrual, the Settlors shall pay an

additional penalty of $200,000 in liquidation of future accrual of penalties, if the EPA performs the remainder or any phase of the Remedial Action. If EPA performs the remainder or any phase of the Remedial Action because of the Settlors' failure to comply with their obligations under this Decree, the Settlors shall reimburse the United States for the costs of doing such work in accordance with Section XX within sixty (60) days of receipt of demand for payment. The United States shall make available upon written request the cost documentation which it maintains pursuant to its current cost documentation procedures. At present, those procedures are set forth in the Financial Management Procedures for Documenting Superfund Costs, September 1986, at pp. III-21-24.

D. Any reports, plans, specifications, schedules, and/or appendices, required by this Decree are, upon approval by EPA, incorporated into this Decree, and any noncompliance with such approved report, plan, specification, schedule, or appendices shall be subject to the stipulated penalty provisions set forth in Section XXV of this Decree.

E. Nothing in this Section shall prevent Settlors from asserting in a dispute over costs that the EPA costs were incurred inconsistent with the NCP. Nothing in this

Section requires Settlors to reimburse the United States for costs incurred for actions inconsistent with the NCP.

VIII. WORK TO BE PERFORMED

A. General Work Phases. The Settlors shall conduct the Remedial Action or shall select one or more qualified contractors to conduct the Remedial Action. The Settlors and/or their contractors shall perform the Remedial Action in accordance with the Statement of Work and approved plans, reports and schedules. The Remedial Action shall be undertaken in the following phases:

1. Biotreatment Pilot Study
2. Remedial Design
3. Site Remediation
4. Demobilization
5. Monitoring, Operation and Maintenance

B. Contractor Selection. For all contractor(s) selected to perform work pursuant to this Decree, Settlors shall obtain a certification from such contractor(s) that said contractor(s) is properly authorized and/or licensed to perform work in Texas.

C. Biotreatment Pilot Study. The Biotreatment Pilot Study phase of the Remedial Action shall consist of: (1) development of a Biotreatment Pilot Study Workplan; (2) the Biotreatment Pilot Study; and, (3) a Biotreatment Pilot Study Report.

1. Biotreatment Pilot Study Workplan.

a. Within fifteen (15) days of the effective date of this Decree Settlors shall supply EPA with a list of contractors under consideration for the Biotreatment Pilot Study. Within fifteen (15) days of EPA's receipt of this list, EPA shall notify the Settlors of any disapproved contractor. Within thirty (30) days of EPA's response, Settlors shall notify EPA of the contractor(s) selected to conduct the Biotreatment Pilot Study.

b. Within fifteen (15) days of receipt of the Settlors' notice, the parties' Project Coordinators and the contractor(s) shall meet to discuss development of the Biotreatment Pilot Study Workplan.

c. Within sixty (60) days of such meeting, the Settlors shall submit to EPA a draft Biotreatment Pilot Study Workplan ("BPS Workplan"). The draft BPS Workplan shall include: 1) a detailed description of the work to be performed; 2) a detailed schedule for implementation of the Biotreatment Pilot Study phase, including submission of the Biotreatment Pilot Study Report; 3) a Quality Assurance/ Quality Control Plan (QA/QC Plan); 4) a Health and Safety Plan; 5) a Spill/Release Contingency Plan; and 6) a Community Relations Plan. The QA/QC Plan and the Health and Safety Plan (items 3 and 4 above) shall be later revised in accordance with sections VII.D.4., X and XI of this Decree.

The Spill/Release Contingency Plan, and the Community Relations Plan (items 5 and 6 above) shall apply throughout the course of the entire Remedial Action, unless otherwise amended pursuant to the terms of this Decree.

d. Within sixty (60) days of receipt of the draft BPS Workplan, EPA will provide comments to the Settlors.

e. Within thirty (30) days of receipt of EPA's comments on the draft BPS Workplan, the Settlors shall submit to EPA a final BPS Workplan which addresses EPA's comments.

f. Within thirty (30) days of receipt of the final BPS Workplan, EPA will notify the Settlors of its approval or disapproval with comments.

g. If the final BPS Workplan is disapproved, the Settlors shall address each comment and resubmit the final BPS Workplan within twenty (20) days of receipt of EPA's disapproval.

h. Within twenty (20) days of receipt of the resubmitted final BPS Workplan, EPA will approve or disapprove the BPS Workplan.

2. <u>Biotreatment Pilot Study</u>.

a. Within ten (10) days of receipt of EPA's approval of the BPS Workplan, Settlors shall initiate the

Biotreatment Pilot Study ("Pilot Study") in accordance with the approved BPS Workplan.

b. During the Pilot Study, meetings shall be held at least bi-monthly (every two months) between the Project Coordinators to discuss the status of the Pilot Study. At least seven (7) days prior to each bi-monthly meeting, Settlors' Project Coordinator shall provide EPA's Project Coordinator with an agenda and any documents or data to be discussed at the meeting.

c. Settlors shall notify EPA upon completion of the Pilot Study.

3. Biotreatment Pilot Study Report.

a. Settlors shall submit to EPA a draft Biotreatment Pilot Study Report ("BPS Report") in accordance with the schedule in the BPS Workplan. The BPS Report shall include, but not be limited to, a description of: (1) the objectives of the Pilot Study; (2) all activities implemented to achieve the objectives; (3) compliance with the QA/QC Plan; (4) any deviation from the QA/QC Plan and an explanation for the deviation; (5) the Pilot Study site, including a description of all apparatus and equipment used to conduct the study and a flow diagram of the treatment processes; (6) an analysis of the effectiveness of the biological treatment in achieving the objectives; (7) the results of the air monitoring program; (8) the results of

the ground water monitoring program; and (9) the results of the wastewater characterization, together with all data collected during the Pilot Study.

b. Within thirty (30) days after receipt of the draft BPS Report, EPA will provide comments to the Settlors.

c. Within thirty (30) days of receipt of EPA's comments on the draft BPS Report, the Settlors shall submit to EPA a final BPS Report which addresses EPA's comments.

d. Within thirty (30) days of receipt of the final BPS Report, EPA will notify the Settlors of its approval or disapproval with comments.

e. If the final BPS Report is disapproved, the Settlors shall address each comment and resubmit the final BPS Report within twenty (20) days of receipt of EPA's disapproval.

f. Within twenty (20) days of receipt of the resubmitted final BPS Report, EPA will approve or disapprove the BPS Report.

g. If the results of the BPS indicate that biological treatment will not achieve the objectives of the Remedial Action, Settlors shall submit a report recommending further action and/or investigation to EPA for approval. EPA will approve, disapprove or modify with comments the

report and recommendation for further action. If, based upon the report, further action or investigation is required by EPA, the [illegible] shall initiate and complete such additional action or investigation in accordance with an approved schedule.

D. Remedial Design.

1. Within twenty (20) days of receipt of EPA's approval of the BPS Report, in accordance with Section VIII. C.3 above, Settlors shall provide EPA with a list of potential Remedial Design ("RD") contractors. Within twenty (20) days of receipt of such list, EPA shall notify Settlors of any disapproved contractor.

2. Within thirty (30) days of receipt of EPA's response, Settlors shall notify EPA of the selected contractor(s).

3. Within twenty (20) days of receipt of the notice of contractor selection, a meeting shall be held between the Project Coordinators and the contractor(s) to discuss:

(1) design objectives and deliverables;

(2) a detailed schedule for the Remedial Design and all remaining phases of the Remedial Action; and

(3) a schedule for the submittal of any necessary modifications to the QA/QC Plan and/or Health and Safety Plan.

4. Within thirty (30) days of the meeting described in paragraph D.3 above, the Settlors shall submit to EPA for approval a detailed schedule for the Remedial Design and all remaining phases of the Remedial Action, and a schedule for the submittal of any necessary modifications to the QA/QC Plan and/or Health and Safety Plan. Within thirty (30) days EPA shall approve or disapprove the schedule with comments. Within twenty (20) days of receipt of EPA's comments, Settlors shall submit to EPA revised schedules which address EPA comments. Within twenty (20) days, EPA will approve or disapprove the schedules.

5. During the RD, meetings shall be held at least bi-monthly (every two months) between the Project Coordinators to discuss the status of the RD. At least seven (7) days prior to each bi-monthly meeting, Settlors' Project Coordinator shall provide EPA's Project Coordinator with an agenda and any documents or data to be discussed at the meeting.

6. Settlors shall submit to EPA the draft RD upon completion of 30%, 60%, 90% and 100% of the design. EPA will review each partial RD submission in accordance with the agreed upon schedule and provide comments to Settlors. Settlors shall incorporate revisions to each partial RD, based on EPA's comments, in the next partial RD submission.

7. Within thirty (30) days of receipt of the 100%, i.e., final RD, EPA will notify Settlors of its approval or disapproval with comments.

8. If the final RD is disapproved, the Settlors shall address each comment and resubmit the final RD within twenty (20) days of receipt of EPA's disapproval.

9. Within twenty (20) days of receipt of the resubmitted final RD, EPA will approve or disapprove the RD.

E. Site Remediation.

1. Within thirty (30) days of receipt of EPA's approval of the RD, Settlors shall initiate the Site Remediation phase of the Remedial Action. The Site Remediation phase shall be conducted in accordance with the schedule in the approved RD.

2. Settlors shall notify EPA in writing upon completion of fifty percent (50%) Site Remediation and ninety percent (90%) Site Remediation.

3. At least ninety (90) days prior to the anticipated completion of the Site Remediation phase, the Settlors shall notify EPA in writing.

4. Within twenty (20) days after the EPA receives that notification, the Settlors and EPA shall meet to discuss the steps necessary to complete the Site Remediation phase. At least seven (7) days prior to this meeting,

Settlors shall provide EPA with a list of activities that must be conducted to complete Site Remediation.

5. Within twenty (20) days after the meeting, EPA will provide the Settlors with a written notice describing any necessary action or items required for completion of the Site Remediation.

6. Upon completion of the Site Remediation, including necessary action or items required by EPA pursuant to paragraph 5 above, the Settlors shall submit written notice to EPA indicating that the Site Remediation has been completed.

7. Within forty-five (45) days of EPA's receipt of the written notice of completion, EPA will inspect the Site to determine that the Site Remediation phase has been completed.

F. Demobilization.

1. At least 120 days prior to anticipated completion of the Site Remediation phase, Settlors shall submit to EPA a draft Demobilization Plan which shall identify those tasks which must be performed to dismantle, decontaminate and remove all equipment used in the Site Remediation phase, and a schedule for performance of such tasks.

2. Within thirty (30) days of receipt of the draft Demobilization Plan, EPA will provide comments to the Settlors.

3. Within thirty (30) days of receipt of EPA's comments on the draft Demobilization Plan, the Settlors shall submit to EPA a final Demobilization Plan which addresses EPA's comments.

4. Within thirty (30) days of receipt of the final Demobilization Plan, EPA will notify the Settlors of its approval or disapproval with comments .

5. If the final Demobilization Plan is disapproved, the Settlors shall address each comment and resubmit the final Demobilization Plan within twenty (20) days of receipt of EPA's disapproval.

6. Within twenty (20) days of receipt of the resubmitted final Demobilization Plan, EPA will approve or disapprove the resubmitted Plan.

7. Settlors shall initiate and carry out Demobilization in accordance with the approved Demobilization Plan. Settlors shall notify EPA upon completion of the Demobilization.

G. Site Remediation Report.

1. Within 120 days after completion of Demobilization, the Settlors shall submit to EPA a draft Site Remediation Report which shall contain (1) all data collected during the Site Remediation phase; (2) a narrative description summarizing major activities conducted and problems addressed during the Site Remediation and

Demobilization phases; (3) as-built plans and modifications from the specifications of the Remedial Design; (4) documentation of compliance with the QA/QC Plan; and (5) certification by a Professional Engineer registered in the State that the work has been completed in compliance with the terms of this Decree and that all remedial equipment has been dismantled, decontaminated and removed from the Site.

2. Within 120 days of receipt of the draft Site Remediation Report, EPA will provide comments to Settlors.

3. Within sixty (60) days of receipt of EPA's comments, Settlors shall submit a final Site Remediation Report which addresses each comment.

4. Within sixty (60) days of receipt of the final Site Remediation Report, EPA will approve or disapprove with comments.

5. If the final Site Remediation Report is disapproved, Settlors shall address EPA's comments and resubmit the final Site Remediation Report within thirty (30) days of receipt of disapproval.

6. Within thirty (30) days of receipt of the resubmitted final Site Remediation Report, EPA will approve or disapprove.

7. Within one hundred twenty (120) days after approval of the Site Remediation Report, EPA will issue its

Certification of Completion for those phases preceding the Monitoring, Operation and Maintenance phase.

H. Monitoring, Operation and Maintenance.

1. At least ninety (90) days prior to anticipated completion of the Site Remediation Phase, Settlors shall submit to EPA a draft Monitoring, Operation and Maintenance ("MOM") Plan. Such plan shall describe activities, consistent with the ROD, to be conducted at the Site after completion of the Site Remediation Phase to ensure that the remedy continues to perform as designed.

2. Within forty-five (45) days of receipt of the MOM Plan EPA will provide comments to Settlors.

3. Within thirty (30) days of receipt of EPA's comments, Settlors shall submit a final MOM Plan which addresses each comment.

4. Within thirty (30) days of receipt of the final MOM Plan, EPA will notify Settlors of its approval/disapproval with comments.

5. Within twenty (20) days of receipt of any disapproval, Settlors shall resubmit the final MOM Plan addressing each comment.

6. Within twenty (20) days of receipt of the resubmitted final MOM Plan, EPA will notify the Settlors of its approval/disapproval.

7. The Settlors shall initiate the Monitoring, Operation and Maintenance Phase in accordance with the schedule included in the approved MOM Plan.

8. In accordance with 42 U.S.C. § 9621(c), Settlors shall perform a review of the Remedial Action every five years. A report shall be submitted to EPA for approval on each fifth year anniversary of the Certification of Completion of Remedial Action pursuant to this Decree.

I. Further Action.

If Settlors obtain data indicating that the Remedial Action is failing or has failed to achieve the objectives set forth in the ROD:

1. Not later than ninety (90) days after receipt of such data the Settlors shall submit to EPA a report discussing and evaluating the data indicating a possible failure, the perceived cause of the failure, recommendation as to whether additional studies are required, as well as a schedule for performing any recommended additional activities.

2. After receipt of such a report, if EPA determines that the failure was caused by a deficiency in the Remedial Action, the Settlors shall submit to EPA a report evaluating alternatives and a proposal for such additional response actions as may be necessary to remedy the failure.

3. EPA will approve, disapprove or modify with comments the report and recommendation for further response action. If, based on the report, additional response action is required by EPA, subject to applicable public participation requirements of CERCLA, the Settlors shall initiate and complete such additional response actions in accordance with an approved schedule.

J. Document Review and Approval.

The provisions of this Section which require Settlors to address EPA comments shall require Settlors to address such comments to EPA's satisfaction; provided however, that EPA's approval of any submittal shall not be withheld in a manner that is arbitrary and capricious, or otherwise not in accordance with law. Any document resubmitted to EPA with any changes shall be submitted with the changes clearly marked. Upon approval, Settlors shall submit two unmarked copies of the final documents to the EPA and one unmarked copy to the DOJ.

K. Settlors shall finance and perform the Wetland Habitat Mitigation Plan set forth in Attachment F in accordance with the schedules therein.

IX. PROJECT COORDINATOR

A. Not later than the effective date of this Decree, EPA and the Settlors shall each appoint a Project Coordinator who shall be responsible for overseeing the

implementation of the Decree and for coordinating communication among the Parties and their contractors. Absence of either Project Coordinator from the Site shall not be cause for stoppage of work.

B. The Settlors' Project Coordinator shall be the individual appointed by the Settlors to act on their behalf as site representative for oversight of performance of daily operations during implementation of the Remedial Action, and to ensure performance of the Remedial Action in compliance with this Decree. All work performed pursuant to this Decree by the Settlors shall be under the direction and supervision of the Settlors' Project Coordinator who shall be a qualified professional engineer or a person otherwise qualified to conduct the activities to be performed.

C. The EPA Project Coordinator shall have the authority vested in the Remedial Project Manager and the On-Scene Coordinator by the NCP as well as the authority to ensure that the Remedial Action is performed in accordance with all applicable statutes, regulations and this Decree. The EPA Project Coordinator further has the authority to require a cessation of the performance of the Remedial Action or any other activity at the Site that, in his or her opinion, may present or contribute to an imminent and substantial endangerment to human health, or the environment

because of an actual or threatened release of hazardous substance from the Site.

D. If the Remedial Action is delayed under order of the EPA Project Coordinator, the Schedule for Completion set forth in this Decree shall be extended to cover the period of time equal to the time of the suspension of the Remedial Action plus reasonable additional time for resumption of activities. If an imminent and substantial endangerment described in paragraph C above is caused by Settlors' non-compliance with the terms of this Decree, then any extension of the compliance deadlines shall be at EPA's sole discretion.

E. Without affecting the Notice Section herein, to the maximum extent feasible, communications and the transmission of documents between EPA and the Settlors shall be made or directed through the Project Coordinators of the respective parties. Meetings shall be scheduled and held in accordance with the provisions of Section VIII above.

F. The EPA and the Settlors may change their respective Project Coordinators. Such a change shall be accomplished by notifying the other party in writing at least seven (7) days prior to the change when possible. The Project Coordinators may delegate on a temporary basis his or her responsibilities and shall notify the other party's Project Coordinator orally or in writing of such delegation.

G. The respective EPA and Settlors' Project Coordinators may assign other representatives, including other employees or contractors, to serve as a Site Representative for oversight of performance of daily operations during the Remedial Action.

H. Prior to invoking Dispute Resolution procedures, any dispute arising between an EPA site representative and Settlors or their contractors which cannot be resolved, shall be referred to the Project Coordinators.

I. Neither the Project Coordinators nor the Site Representatives has the authority to modify in any way the terms of this Decree. However, the EPA Project Coordinator may make decisions concerning whether field activities are in compliance with this Decree, and such determinations shall be documented in writing.

J. The Project Coordinators may, by written agreement, change the schedules for work to be performed. Such changes shall not be considered modifications to this Decree.

X. HEALTH & SAFETY PLAN

A. The Settlors shall submit to EPA a Health and Safety Plan in accordance with the schedule in Section VIII.

B. The Health and Safety Plan shall satisfy the requirements of the Occupational Safety and Health Guidance for Hazardous Waste Site Activities.

C. All persons on Site shall comply with the Health and Safety Plan, except that EPA employees, representatives, and contractors shall comply with EPA's health and safety provisions.

XI. QUALITY ASSURANCE/QUALITY CONTROL

A. The Settlors shall submit to the EPA for approval in accordance with the schedule in Section VIII herein, a Quality Assurance/Quality Control (QA/QC) Plan for all phases of the Remedial Action. The QA/QC Plan shall be prepared in accordance with current EPA guidance including, but not limited to, "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAMS-005/80)". The United States will submit copies of current EPA guidance documents to Settlors upon request.

B. The Settlors shall use QA/QC procedures in accordance with the QA/QC Plans submitted pursuant to this Decree, and shall utilize standard EPA chain of custody procedures, as documented in the National Enforcement Investigations Center Policies and Procedures Manual as revised in May 1986, and the National Enforcement Investigations Center Manual for the Evidence Audit published in September 1981, for all sample collection and analysis activities. In order to provide quality assurance and maintain quality control regarding all samples collected pursuant to this Decree, the Settlors shall:

1. Ensure that all contracts with laboratories utilized by the Settlors for analysis of samples taken pursuant to this Decree permit laboratory inspection by EPA personnel and EPA authorized representatives to assure the accuracy of laboratory results;

2. Ensure that laboratories utilized by the Settlors for analysis of samples taken pursuant to this Decree perform analyses according to EPA methods as documented in the "Contract Lab Program Statement of Work for Inorganic Analysis" and the "Contract Lab Program Statement of Work for Organic Analysis:" dated July 1985 or other analytical methods approved by EPA; and

3. Ensure that all laboratories utilized by the Settlors for analysis of samples taken pursuant to this Decree participate in an EPA or EPA equivalent QA/QC program. As part of the QA/QC program and upon request by EPA, such laboratories shall perform, at their expense, analyses of samples provided by EPA to demonstrate the quality of such laboratory's data. EPA may provide to each laboratory a maximum of eight samples per year per analytical combination (e.g., eight aqueous samples for analysis by gas chromatography/mass spectrometry; eight soil/sediment samples for analysis by gas chromatography/mass spectrometry).

XII. SPILL/RELEASE CONTINGENCY PLAN

The Settlors shall submit to EPA for approval in accordance with Section VIII herein, a Spill/Release Contingency Plan which shall address exposure of both site workers and the public to releases or spills at and/or from the Site. The Spill/Release Contingency Plan shall describe, but not be limited to the following:

1. safety concerns and notification procedures to be implemented in the event of an accident, system failure, or other unexpected event;
2. methods of controlling emissions during the Remedial Action; and
3. the inclusion of action levels and proposed activities which will be taken in response to the exceedance of, or approach to, an action level.

XIII. COMMUNITY RELATIONS PLAN

The Settlors shall develop and submit for EPA approval a Community Relations Plan. The Plan shall include but not be limited to making available all monitoring data, placing all approved plans and reports in the designated repositories, and sending a quarterly update to interested persons which shall summarize the previous quarter's activities and discuss the projected activities for the next

quarter. Settlors shall implement the approved Community Relations Plan for all phases of the Remedial Action as set forth in Section VIII above.

XIV. SAMPLING AND ANALYSIS

A. The Settlors shall use the quality assurance, quality control and chain of custody procedures specified in its QA/QC Plan for all sample collection and analysis conducted pursuant to this Decree.

B. Any data generated or obtained by the Settlors that are related to the Sheridan Site shall be provided to EPA within ten (10) days of receipt of any request by EPA for such data, in a form specified by the EPA Project Coordinator.

C. The Settlors, in their contracts, shall provide that EPA personnel or authorized representatives be permitted access to any laboratory utilized by the Settlors and/or their contractors in implementing this Decree. In addition, the Settlors shall have such laboratory or laboratories analyze samples submitted by EPA for quality assurance/quality control review consistent with the QA/QC Plan.

D. EPA employees and EPA's authorized representatives shall have the right to split or take duplicates of any samples collected by the Settlors or their agents at the Site during the implementation of the Remedial Action.

E. During the Remedial Action the Settlors shall give EPA notice of any sampling conducted in accordance with RAS, CLP protocols in accordance with CLP sample space submittal requirements of which EPA will advise Settlors and at least thirty (30) days notice of any sampling conducted in accordance with SAS, CLP protocols. If necessary, this notice may be provided orally to the EPA Project Coordinator. The EPA Project Coordinator may waive the notice requirement for designated sampling. Such waiver must be confirmed in writing by one of the Project Coordinators.

F. All data, factual information, and documents submitted by Settlors to the EPA pursuant to this Decree shall be subject to public inspection pursuant to the procedures set forth in 40 C.F.R. Part 2. The Settlors may not assert a claim of confidentiality regarding any hydrogeological or chemical data. However, the Settlors may assert a claim of business confidentiality in accordance with 40 C.F.R. Part 2 and Section 104(e)(7) of CERCLA, for any process, method or technique or any description thereof that the Settlors claim constitutes proprietary or trade secret information developed by the Settlors or developed by any contractor or the contractor's subcontractors.

XV. REPORTING AND APPROVALS/DISAPPROVALS

The Settlors shall provide written progress reports

to EPA on a monthly basis or as the Parties otherwise agree. These progress reports shall describe the actions that have been taken toward achieving compliance with this Decree, including a general description of activities completed during the past month, activities projected to be commenced or completed during the next reporting period, summary and evaluation of QA/QC information, and any problems that have been encountered or are anticipated by the Settlors in commencing or completing the Remedial Action. Progress reports shall include all data received during the reporting period and the status of credits accrued or applied under Section XXV (Stipulated Penalties).

These progress reports are to be submitted to EPA by the 15th of each month for work done the preceding month and shall describe the work planned for the current month. The first monthly progress report shall be submitted within thirty (30) days after the effective date of this Decree. The discussion of problems in the monthly progress report is not the notice specified for the Force Majeure in Section XXVI.

EPA will notify Settlors of any deficiencies in the progress reports within fifteen (15) days of receipt of such report by EPA. Within fifteen (15) days of receipt by the Settlors of a notice of deficiency of a progress report,

the Settlors shall make the necessary changes and resubmit the progress report to EPA.

XVI. SITE ACCESS

A. The Site Owner-Settlor shall:

1. Permit all Parties and their representatives, including but not limited to contractors, to have access at all times to the Site and to any contiguous property for purposes of performing all activities required by this Decree.

2. Not undertake any action which would or might interfere with implementation of the Remedial Action or which would or might interfere with the integrity of the Remedial Action at any time.

3. Notify all Parties at least ninety (90) days prior to initiating any activity at the Site. The Owner-Settlor shall not initiate or permit any activity at the Site without the prior written consent of EPA and Settlors' Project Coordinator.

4. Notify all parties at least ninety (90) days prior to any transfer, lease, or sale of any ownership interest in the Site. All potential and/or actual buyers and/or lessees shall be given copies of this Decree and all documents of transfer, lease, or sale must contain a provision requiring compliance with this Decree.

B. Within thirty (30) days of the effective date of this Decree, Settlors and/or the Owner-Settlor shall record a copy of this Decree in the official public records of real property in Waller County to put any prospective purchaser of the property on notice of the existence of, and activities performed under, this Decree. The Settlors shall provide EPA with notice of the date of filing and the county volume and page reference or the clerk's file number for the filed Decree.

C. To the extent that rights of access to property other than the Site is presently required for the proper and complete performance of this Decree, the Settlors shall within sixty (60) days of the effective date of this Decree use due diligence (which need not include litigation) to obtain necessary access rights from the present owners or those persons who have control. Access agreements shall provide reasonable access to the Settlors, the Trustees, the Contractor(s), the United States, the State, and their representatives. In the event that access rights are not obtained within the sixty (60) day period, the Settlors shall notify EPA within sixty-five (65) days of the effective date of this Decree regarding both the lack of, and efforts to obtain, such access rights.

D. To the extent it becomes necessary during the performance of the Remedial Action to obtain rights of

access over property other than the Site for the proper and complete performance of this Decree, the Settlors shall notify EPA forty-five (45) days prior to the date on which access is required or within seven (7) days of when Settlors first became aware that such access is required, which ever is later, and during the period following such notice the Settlors shall exercise due diligence (which need not include litigation) to obtain access agreements from the present owners or those persons who have control.

E. During the effective period of this Decree, the United States, the State, and their representatives, including contractors, shall have the same access rights to the Site and contiguous areas as the Settlors, for purposes of conducting any activity authorized by this Decree, including but not limited to:

1. Monitoring the progress of activities taking place;

2. Verifying any data or information submitted to EPA;

3. Conducting investigations relating to contamination at or near the Site;

4. Obtaining samples at the Site;

5. Inspecting and copying records, operating logs, contracts, or other documents required to assess the Settlors' compliance with the Decree; and

6. Using photographic, videographic, or other recording de[illegible]

F. No provision in this Section or this Decree is intended to limit any inspection or access authority that either the United States or the State of Texas may have under any other law.

XVII. ASSURANCE OF ABILITY TO COMPLETE WORK

A. The Settlors shall demonstrate their ability to complete the Remedial Action and to pay all claims that arise from the performance of the Remedial Action by obtaining, and presenting to EPA for approval within thirty (30) days after the effective date of this Decree, one of the following items: 1) a performance bond; 2) a letter of credit; or 3) a guarantee by a third party. In lieu of any of the three items listed above, the Settlors may present to EPA, within thirty (30) days after the effective date of this Decree, financial information sufficient to satisfy EPA that the Settlors have enough assets to make it unnecessary to require additional assurances. EPA will have ninety (90) days from the receipt of the information to make a determination of the adequacy of the financial assurance and to communicate that determination to the Settlors. If EPA determines that the financial assurance submitted by the Settlors is inadequate, EPA will provide to the Settlors a brief explanation of the reasons supporting EPA's

determination. Upon such notice, Settlors shall either supply additional financial information or obtain one of the three financial instruments listed above.

B. Should EPA determine that the financial assurances submitted by the Settlors are adequate, the Settlors shall submit annual updated financial information to EPA during the pendency of the Remedial Action. The yearly report should be submitted within thirty (30) days of the anniversary of the effective date of this Decree. If EPA determines the financial assurances of the Settlors to be inadequate, the Settlors shall supply additional financial information or obtain one of the three financial instru ments listed above.

C. Anything herein notwithstanding, in no event shall the Settlors be relieved of their responsibility to implement the Remedial Action under this Decree in a timely fashion by reason of any inability to obtain or failure to maintain in force any insurance policies, or by reason of any dispute between the Settlors and any of their insurers pertaining to any claim arising out of the Remedial Action, or arising out of any other activity required under this Decree.

XVIII. TRUST FUND

A. The Settlors shall present to EPA a signed Trust

Agreement establishing the "Sheridan Site Trust Fund" within ten (10) days after the effective date of this Decree. The Trust Agreement shall confer upon the Trustee all powers and authority necessary to fulfill the obligations of the Settlors under this Decree. The Trust Agreement shall instruct the Trustees to use the money in the Sheridan Site Trust Fund: (1) to pay the contractor(s) for the work described in the ROD, (2) to pay other proper expenses required to be paid by the Settlors pursuant to this Decree. In the event of the inability to pay or insolvency of any one or more of the Settlors, or if for any other reason one or more of the Settlors do not provide their share of funds to the trust, the remaining Settlors agree and commit to fund, implement and complete the Remedial Action and activities provided for in this Decree. Payment of money to the Sheridan Trust Fund is not a fine, penalty, or monetary sanction.

B. The Settlors shall make payments to the Trust when and to the extent necessary to ensure the uninterrupted and timely completion of the Remedial Action. Any interruption of the Remedial Action due to the failure of Settlors to make payments to the Sheridan Site Trust Fund shall be subject to the stipulated penalty provisions of Section XXV.

C. EPA does not in any respect guarantee the monetary sufficiency of the Sheridan Site Trust Fund.

D. With respect to this Decree, Settlors authorize the Sheridan Site Trust to accept service of process on their behalf. The agent for service of process for the Sheridan Site Trust will be:

C T Corporation System
Americana Building
811 Dallas Avenue
Suite 1500
Houston, Texas 77002

XIX. PREAUTHORIZATION

Nothing in this Decree shall be considered to be a preauthorization of a CERCLA claim within the meaning of Section 111 of CERCLA and 40 C.F.R. § 300.25(d).

XX. RESPONSE COST REIMBURSEMENT

A. Within sixty (60) days of the effective date of this Decree, the Settlors shall deliver a certified or cashier's check payable to "EPA Hazardous Substance Superfund" in the amount of $430,000 for costs associated with the Site incurred by the EPA and/or the United States on or before December 31, 1988, to the following address:

U.S. Environmental Protection Agency
Superfund - Sheridan Disposal Services, Region 6
P.O. Box 360582M
Pittsburgh, Pennsylvania 15251
Attn: Superfund Accounting

A copy of the check and the letter enclosing the check shall be submitted to the United States in accordance with Section XXIX herein. Such payment by the Settlors is not a penalty, fine, or monetary sanction of any kind, but

is reimbursement to the EPA and/or the United States and is in full settlement of EPA's and the United States' claims against Settlors for all costs incurred by the EPA and/or the United States at the Sheridan Site through December 31, 1988.

B. Not later than 60 days after the effective date of this Consent Decree, the Settlors shall deliver a certified or cashier's check payable to the "Department of the Interior," ("DOI") in the amount of $20,000.00, which represents all of the reasonable costs to DOI of assessing the injury, destruction or loss of natural resources for which the Secretary of the Interior is trustee, as a result of the release of hazardous substances at or from the Sheridan Site and future costs to DOI associated with the development, implementation, and monitoring of the Wetland Habitat Mitigation Plan set forth in Attachment F. The check should make reference to the "Sheridan Disposal Services Site" and be mailed to:

Department of the Interior
Office of the Secretary
Fiscal Section/Room 5257
18th and E Streets, N.W.
Washington, D.C. 20240

A copy of the check should be mailed to:

Office of Environmental Project Review
Room 4239 (PEP)
Department of the Interior
Washington, D.C. 20240

Such payment by the Settlors is not a penalty, fine or monetary sanction of any kind, but is reimbursement to DOI and/or the United States and is in full settlement of DOI's and the United States' claims against Settlors for all costs incurred by DOI and/or the United States at the Sheridan Site with regard to Natural Resource Damages.

XXI. COVENANT NOT TO SUE

A. Except as expressly provided herein, the United States covenants not to sue or take any administrative action against the Settlors for any civil or administrative liability to the United States under CERCLA with respect to the Source Control Operable Unit, including future liability, resulting from any release or threatened release of hazardous substances, which release or threatened release is addressed by the Remedial Action. Further, the United States hereby expressly enters into a covenant not to sue Settlors for all costs incurred by the United States after December 31, 1988, with respect to the Source Control Operable Unit at the Site, except for those costs payable under the Administrative Order on Consent, CERCLA VI-01-87, including any related interest determined in accordance with Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). This Section is not, and shall not be construed as a covenant not to sue: (1) any Settlor in the event that the requirements of this Decree are not carried out, or (2) any other person or

entity not a party to this Decree. This Covenant Not to Sue does not apply to any future removal or remedial actions taken at the Site beyond the scope of this Decree, including, but not limited to, the Ground Water Operable Unit. With respect to future liability, the Covenant Not to Sue shall take effect upon the issuance of a written Certification of Completion by EPA under Section VIII(G)(7) that the Remedial Action, except for the MOM Phase, has been satisfactorily completed in accordance with all of the requirements of this Decree.

B. The United States, with the written concurrence of the Secretary of the Interior or his delegee, attached as Attachment G, covenants not to sue the Settlors under Section 107(a)(4)(C) of CERCLA for damages to natural resources, for which the Secretary of the Interior is trustee, resulting from the presence or release or threatened release of hazardous substances from the Site. The covenant provided by this Subsection is contingent upon the Settlors' implementation and completion of the Wetland Habitat Mitigation Plan pursuant to this Decree and shall not limit the rights of the United States to enforce the Settlors' obligations to carry out the Wetland Mitigation Plan.

C. The Settlors hereby covenant not to sue the United States, including any and all departments, agencies,

officers, administrators, and representatives thereof, for any claim, counter-claim, or cross-claim asserted, or that could have been asserted, arising out of or relating to the Site. This covenant not to sue does not apply to claims not now known to Settlors, as well as any future removal or remedial actions taken at the Site beyond those activities specified in this Decree.

D. The provisions of Paragraph A, B and C of this Section shall not apply to the following claims:

1. Claims based on a failure by the Settlors to fulfill the requirements of this Decree;

2. Claims for costs incurred by the United States as a result of the failure of the Settlors to fulfill the requirements of the Decree;

3. Claims based on criminal liability;

4. Claims based on liability arising from hazardous substances removed from the Site pursuant to this Decree by any Party;

E. Notwithstanding any other provisions of this Decree, the United States reserves the right to: (1) take appropriate response or enforcement action, in this proceeding; or (2) institute a new action to seek additional removal or remedial measures at the Site beyond the scope of this Decree through an action to compel the Settlors to perform removal or remedial work; or (3) institute an action

to compel the Settlors to reimburse the United States or the State for response costs if:

1. For proceedings prior to EPA Certification of Completion of the Remedial Action:

a. conditions at the Site (including the release or threat of release of hazardous substances), previously unknown to the United States or its contractors are discovered after the entry of this Decree; or

b. information is received after the date of entry of this Decree;

and these previously unknown conditions or this information indicates that the Remedial Action is not protective of human health and the environment;

2. For proceedings subsequent to EPA Certification of Completion of the Remedial Action:

a. conditions at the Site previously unknown to the United States or its contractors are discovered after the Certification of Completion; or

b. information is received after the Certification of Completion by EPA;

and these previously unknown conditions or this information indicates that the remedial action is not protective of human health and the environment;

F. If Settlors are in compliance with the terms of this Decree, the parties to this Decree agree that the

Settlors are entitled to the contribution protection provided by Section 113(f)(2) of CERCLA, for matters covered by the Covenant Not to Sue of this Decree. The United States shall be under no obligation to assist the Settlors in any way in pursuing or defending against suits for contribution brought against the Settlors alleging liability for matters covered by this Covenant Not to Sue by persons or entities that have not entered into this Decree. Nothing in this paragraph shall be deemed to modify the provisions of 40 C.F.R. § 2.401 et seq.

XXII. DE MINIMIS SETTLORS' SETTLEMENT

A. Pursuant to Section 122(g) of CERCLA, in the judgment of EPA, the amount, toxicity, or other hazardous effects of the substances contributed by each of the De Minimis Settlors is minimal in comparison to the amount, toxicity, or other hazardous effects of all substances at the Site.

B. Each De Minimis Settlor has paid to the Sheridan Site Trust an appropriate amount of the costs of the Remedial Action.

C. Except as otherwise provided in this Section and in Section XXI, the United States and the Settlors hereby covenant not to sue the De Minimis Settlors concerning any liability under CERCLA, including future liability, resulting from any release or threatened release of a hazardous

substance addressed by the Remedial Action. Notwithstanding any other provisions of this Decree, De Minimis Settlors shall have no other obligations under this Decree except as set forth and reserved in this Section.

D. The covenant not to sue contained in this Section shall not apply to: (1) any claims or demands based on liability arising from the past, present, or future disposal of waste materials by the De Minimis Settlors outside of the Sheridan Site; (2) a situation where information not currently known to EPA is discovered which indicates that any De Minimis Settlor contributed hazardous substances to the Site in such greater amount that the De Minimis Settler no longer qualifies as a de minimis party; (3) claims based on criminal liability; or (4) claims by private parties for personal injury or property damage or other losses alleged in connection with the presence of any hazardous substances at the Site.

E. Except for the liabilities listed in paragraph D above, the Settlors have assumed all civil liability under CERCLA of the De Minimis Settlors to the United States relating to the Site, including but not limited to liability arising from the disposal of hazardous substances at the Site.

XXIII. INDEMNIFICATION

The Settlors shall indemnify the United States and hold the United States harmless for any claims arising from any injuries or damages to persons or property resulting from any acts or omissions of the Settlors, their contractors, subcontractors, or any other person acting on their behalf in carrying out any activities pursuant to the terms of this Decree. Provided, however, that the foregoing indemnity shall not be applicable to matters arising from negligent or willful acts or omissions of the United States of its officers, employees, agents, contractors, subcontractors or any other person acting on its behalf.

XXIV. RESERVATION OF RIGHTS AND RETENTION OF CLAIMS

A. By entering this Decree the Parties do not release or covenant not to sue any other persons or entities, not party to this Decree, from any claims or liabilities which may exist. The right to pursue such claims or liabilities is expressly reserved.

B. This Decree does not create any private causes of action in favor of any person not a signatory to this Decree or release any person not a signatory to this Decree from any liability, duty, responsibility, or obligation which they otherwise might have at law or equity.

C. The entry of this Decree shall not be construed to be an acknowledgement by the Settlors that the release or

threatened release concerned constitutes an imminent and substantial endangerment to the public health or welfare or the environment. Except as otherwise provided in the Federal Rules of Evidence, the participation by any Settlors shall not be considered an admission of liability for any purpose, and the fact of such participation shall not be admissible in any judicial or administrative proceeding including a subsequent proceeding under this Section. Further, Settlors do not admit, and specifically deny, responsibility for the disposal of materials at the Site and deny any legal or equitable liability under any statute, regulation, ordinance, or common law for any response costs or damages caused by storage, treatment, handling, disposal, or presence of materials or actual or threatened release of materials at the Site.

D. Nothing in this Decree shall be deemed to limit the response authority of the United States pursuant to any federal response authority under any law. However, the United States may not utilize response authority to obtain a result inconsistent with the exercise or result of Dispute Resolution under this Consent Decree.

E. The Settlors reserve all rights, defenses, claims, causes of action or counterclaims which they may have at law or in equity against any person or other entity not a

signatory to this Decree for any liability it may have arising out of or relating to the Site.

F. The Settlors shall have the benefit of Section 113(f) of CERCLA and any other applicable rights to limit their liability to persons or entities not parties to this Decree, to seek contribution, together with any other equitable or legal remedy which Settlors may have, from any person or entity not a party to this Consent Decree for costs incurred or any other relief with respect to the Site in order to enable the Settlors to recover the full relief available to them a law or in equity.

G. Settlors waive any defenses based upon the doctrines of res judicata, collateral estoppel and/or claim-splitting which Settlors may have in this action or any other proceeding as to any claim by the United States for further remediation at the Site other than the Source Control Operable Unit.

XXV. STIPULATED PENALTIES

A. Subject to the Force Majeure and Dispute Resolution provisions in this Decree the Settlors shall pay stipulated penalties as set forth below:

1. For each failure to submit an adequate monthly progress report, Settlors shall pay a stipulated penalty of $2,000. For each failure to submit a monthly progress report in a timely fashion in accordance with Section XV,

Settlors shall pay stipulated penalties of $500 per day up to a total of $2,000. For each failure to submit a monthly progress report at all, the Settlors shall pay a stipulated penalty of $10,000.

2. For each failure of a laboratory to retain samples in accordance with CLP guidelines, Settlors shall pay a stipulated penalty of $3,000 for each sample.

3. For each failure to cease activity when the EPA Project Coordinator orders a cessation or halt of activities in accordance with Section IX.A., Settlors shall pay a stipulated penalty of $25,000 per day.

4. For each failure to meet any requirement in this Decree (except for those activities covered in 1, 2 and 3 above), including but not limited to submittal of a late report, the Settlors shall pay stipulated penalties in the amount set forth below for each day, or part thereof during which the violation continues:

Period of Failure to Comply	Penalty Per Violation Per Day
1st through 5th day	$ 750
6th through 14th day	$ 1,500
15th through 45th day	$ 3,000
46th day and beyond	$ 6,000

B. If any required plans submitted by Settlors are submitted in advance of any deadline applicable under this Decree, the Settlors shall obtain a day of credit for each day of early completion. This credit may be used to extend

the deadlines for submitting subsequent plans. A maximum of ten (10) days credit may be accrued, and a maximum of ten (10) days credit may be applied to extend any one deadline. Credit for early submission of progress reports can only be applied to submission of other progress reports.

C. Except as otherwise provided, stipulated penalties shall begin to accrue from the date of violation and run until the violation is corrected. EPA shall advise the Settlors in writing as soon as EPA has knowledge that a violation subject to stipulated penalties has occurred. Failure of EPA to advise Settlors in a timely manner shall not be a waiver of the stipulated penalties.

D. A single act or omission shall not be the basis for more than one type of stipulated penalty. However a single act or omission which continues for more than one day may result in more than one day of stipulated penalties.

E. Payment of Stipulated Penalties

1. Stipulated penalties shall be paid by certified or cashier's check and shall be paid within thirty (30) days of receipt of a demand letter for payment sent by EPA.

2. During the pendency of any dispute resolution of this Decree, stipulated penalties shall continue to accrue, but the obligation to pay shall be stayed until the dispute is resolved. If the Settlors are successful in any Dispute Resolution, they shall have no liability to pay

stipulated penalties or other sanctions with regard to the matter submitted for Dispute Resolution.

3. The United States may, within its sole and nonreviewable discretion, waive imposition of all or any part of any stipulated penalties.

4 The check for stipulated penalties or any other payment due the United States pursuant to this Decree shall be made payable to the Hazardous Substance Superfund and sent to:

United States Environmental Protection Agency
Superfund - Sheridan Site, Region 6
P.O. Box 360582M
Pittsburgh, PA 15251

Attention: Superfund Accounting

A copy of the transmittal letter, which shall include a brief description of the violation and the check, shall be sent to EPA in accordance with the Notice provisions.

XXVI. FORCE MAJEURE

A. Force Majeure, for purposes of this Decree, is defined as any event arising from causes beyond the control of the Settlors that delays or prevents the performance of any obligation under this Decree and which could not have been prevented or mitigated by the exercise of due diligence by the Settlors, and which delays or prevents the performance of any obligation under this Consent Decree. Force

Majeure shall not include increased costs or expenses of the Remedial Action; any unwillingness or inability to pay by one or more Settlors; any inability to obtain or failure to maintain in force any insurance policies; any dispute between Settlors and any of their insurers; or the Settlors' failure to apply for any necessary approvals or to provide all required information therefor in timely manner.

B. When circumstances are occurring or have occurred that delay or prevent the performance of any obligation under this Decree, whether or not due to Force Majeure, the Settlors shall promptly (in no event later than ten (10) days from the time the Settlors or the Settlors, contractors or subcontractors know or with due diligence should know that a delay has been or will be encountered) supply a written notice as set forth in the Notice Provisions of this Consent Decree. The Notice shall include a detailed explanation of the reason(s) for and anticipated duration of any such delay; the measures taken and to be taken by the Settlors to prevent or minimize delay; and the timetable for implementation of such measures. Failure to notify in writing within the required ten (10) days shall constitute a waiver of any claim of Force Majeure. The Settlors shall exercise due diligence to minimize the effect of any Force Majeure condition and not delay the performance of any activities not affected by the event of Force Majeure.

C. If the United States agrees that a delay is or was attributable to a Force Majeure, the parties shall modify the applicable schedule to provide such additional time as may be necessary to allow the completion of the specific obligation and/or any succeeding phase of the work affected by such delay, for a period equal to the actual duration of the delay plus reasonable additional time for the resumption of work.

D. If the EPA and Settlors cannot agree as to whether the reason for the delay was Force Majeure, or whether the duration of the delay is or was warranted under the circumstances, the Parties shall resolve the dispute according to the Dispute Resolution provisions of this Consent Decree.

E. Denial of Access to the Site or any act by the Owner-Settlor that interrupts or delays the Remedial Action shall be a Force Majeure only with respect to the non-Owner-Settlors, if it interferes with implementation of the Remedial Action by the non-Owner-Settlors.

XXVII. DISPUTE RESOLUTION

A. If the Parties cannot resolve any dispute arising under this Decree then the interpretation advanced by the United States shall control unless the Settlors invoke the Dispute Resolution provisions of this Section. All activities not affected by the dispute shall continue in

accordance with the approved schedules, plans, reports, or documents.

B. Any dispute that arises with respect to the meaning or application of this Decree shall, in the first instance, be the subject of good faith informal negotiations between the Parties. Such period of informal negotiations shall commence upon the transmission by the Settlors to the United States of written notification of the invocation of Dispute Resolution. Informal negotiations shall not extend beyond forty-five (45) days from the date EPA receives notification unless the Parties agree otherwise in writing.

C. If any dispute is not resolved within fifteen (15) days after notice of the existence of the dispute is provided to EPA, Settlors shall have the right to submit the dispute to an EPA Region VI Hearing Officer for a non-adjudicatory hearing on the record for resolution within an additional thirty (30) day period.

D. If agreement is not reached during the period of informal negotiations, or a Hearing Officer renders a decision adverse to Settlors, the Settlors may file, within thirty (30) days of the end of the informal negotiation period or such decision, a petition with the Court requesting the Court to hear and resolve the dispute. The petition shall describe the nature of the dispute, all documents which support the Settlors' position, and include

a proposal for its resolution. The United States shall have thirty (30) days to respond to the petition.

E. In any dispute, the Settlors shall have the burden based on the record of proving that EPA's position is arbitrary and capricious, or otherwise not in accordance with law.

F. Unless otherwise specifically set forth herein, the fact that Dispute Resolution is not specifically set forth in the individual Sections of this Decree is not intended to and shall not bar the Settlors from invoking this Section as to any dispute issue arising under this Decree.

XXVIII. RETENTION OF RECORDS

A. All Settlors shall insure that all records and documents now in their possession or control that relate in any manner to the Site, regardless of any document retention policy to the contrary, are preserved and retained for a period of six years after the termination of this Decree, except for those records and documents described in B below. The EPA shall insure that all records or documents in its possession or control that relate in any manner to the Site are preserved and retained in accordance with its applicable document retention procedures. If such records or documents are to be destroyed earlier than six years after the termination of this decree, the party proposing to destroy

documents shall give all other parties prior notice of such destruction and provide an opportunity for retention.

B. Until termination of this Consent Decree, the Settlors shall preserve, or shall instruct the Contractor, the Contractor's subcontractors, and anyone else acting on the Settlors' behalf at the Site to preserve (in the form of originals or exact copies, or in the alternative, microfiche of all originals) all other records, documents, and information of whatever kind, nature, or description relating to the performance of the Remedial Action. Upon issuance of the Certificate of Completion, Settlors may either preserve or give to EPA and shall instruct their contractors and subcontractors, and anyone else acting on the Settlors behalf to preserve or give to EPA all records, documents and information of whatever kind, nature or description relating to performance of the remedy. For records retained after the Certification of Completion, Settlors and anyone else acting on the Settlors behalf shall provide notice to EPA ninety (90) days prior to the destruction of such records and shall deliver such records to EPA upon request.

XXIX. FORM OF NOTICE

All notices including approvals and disapprovals required to be given pursuant to this Decree shall be in writing unless otherwise expressly authorized and shall be deemed delivered when either hand delivered or mailed via

certified letter or its equivalent. Documents, including reports, approvals, and other correspondence, to be submitted pursuant to this Decree shall be hand delivered or sent by certified mail or its equivalent to the following addresses or to such other address as the Settlors and EPA may hereafter designate in writing:

As to the EPA:

Office of Regional Counsel
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

and

Chief, Superfund Enforcement Branch
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

and

The EPA Project Coordinator
- Sheridan Site Superfund Texas Section (6H-ET)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

and

up to two EPA Contractors as EPA directs.

As to the United States

Chief, Environmental Enforcement Section
Land and Natural Resources Division
U.S. Dept. of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044

As to the State:

Hazardous and Solid Waste Division
Texas Water Commission
Capitol Station
P.O. Box 13087
Austin, Texas 78111

Attention: TWC Project Coordinator/Sheridan Site

As to Settlors:

Sheridan Site Project Manager
P.O. Box 440005
Houston, Texas 77244-0005

Attention: John Cotterell

and up to two other addressees as Settlors direct.

XXX. ADMISSIBILITY OF DATA

No Party shall have the right to object to the admissibility into evidence of analytical data that it gathers and generates on the grounds of hearsay or on the grounds of its own failure to maintain chain of custody. No Party shall have the right to object to the admissibility of analytical data sought to be introduced by another Party if the appropriate procedures, delineated in Section XI, were followed with respect to such data. For the purpose of seeking the admission into evidence of analytical data each Party may demonstrate compliance with the appropriate procedure through one summary witness per laboratory.

XXXI. MODIFICATION

Except as provided for herein, there shall be no modi-

fication of this Decree without written approval of all parties to this Decree and entry by the Court.

XXXII. TERMINATION AND SATISFACTION

The provisions of this Decree shall be deemed satisfied upon the Settlors' receipt of written notice from EPA that the Settlors have demonstrated, to the satisfaction of EPA, that all of the terms of this Decree have been completed.

XXXIII. SEVERABILITY

The nullification of any or more provisions of this Decree, either by agreement of the Parties or by judicial action shall not affect the validity of effectiveness of the remaining provisions.

XXXIV. SECTION HEADINGS

The section headings set forth in this Decree and its Table of Contents are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Decree.

XXXV. CONTINUING JURISDICTION

The Court specifically retains jurisdiction over both the subject matter of and the Parties to this action for the duration of this Decree for the purposes of issuing such further orders or directions as may be necessary or appropriate to construe, implement, modify, enforce,

terminate, or reinstate the terms of this Decree or for any further relief as the interest of justice may require.

XXXVI. PUBLIC COMMENT

This Decree is subject to the public comment provisions of CERCLA Section 122, 42 U.S.C. § 9622.

XXXVII. EFFECTIVE DATE

This Consent Decree is effective upon the date of its entry by the Court.

SIGNED AND ENTERED this 16th day of October 1987

John D. Rainey
United States District Judge

SHERIDAN SOURCE CONTROL CONSENT DECREE

For the United States:

BARRY M. HARTMAN, Acting Assistant
Attorney General
Environment and Natural Resources Division
United States Department of Justice

Barry M. Hartman

Date: NOV 20 1991.

BEVERLEE J. DeSTEIN, Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
10th & Pennsylvania Avenue, N. W.
Washington, D.C. 20530

Beverlee J. DeStein

Date: November 25th 1991.

For the U.S. Environmental Protection Agency

Robert E. Layton Jr.

Date: 01-17-90

ROBERT E. LAYTON JR.
Regional Administrator
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Pamela Phillips

Date: 9-27-89

PAMELA PHILLIPS
Senior Assistant Regional Counsel
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

SHERIDAN SITE CONSENT DECREE

The undersigned have reviewed the Consent Decree dated August 7, 1989, and evidence their agreement thereto by their signature.

_____	Duane Clifford Sheridan
Date	Duane Clifford Sheridan
_____	Grace Crafton Woolever Sheridan
Date	Grace Crafton Woolever Sheridan
_____	_____
Date	Rupert Daniel Sheridan
August 24, 1989	_____
Date	Pat John Sheridan

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

R. K. Hem
Signature

4/18/90
Date

General Manager
Title

Evans Cooperage of Houston, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

SMITH INTERNATIONAL, INC.

By: _____ LGW VMC DEPT _____ May 4, 1990

Signature Date

Chief Financial Officer

Title

SMITH INTERNATIONAL, INC.

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Richard Sloan
Signature

Oct 23, 1989
Date

Manager, Compliance + Audit
Title

DYN

ARCO Chemical Co
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Max L. Lukens
Signature

_____
Date

Max L. Lukens, Senior Vice President and Chief Financial Officer
Title

BAKER HUGHES INCORPORATED, on its own behalf and as successor-in-interest to HUGHES TOOL COMPANY

_____
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Jane E. [illegible] — 1/23 89

Signature — Date

Associate General Counsel

Title

Burroughs Corporation

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Janet D Smith
Signature

8/25/89
Date

Associate General Counsel
Title

NL Industries, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

Sept. 15, 1989
Date

Vice President
Title

Betz Laboratories, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Benjamin Blum — Signature

Sept. 1, 1989 — Date

Senior Associate Counsel
Title

Champion International Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Peter N Burnz
Signature

8/30/89
Date

Ex. V.P.
Title

Chemical Exchange Industries
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

_____ Signature

8/31/89 Date

_____ Title

_____ Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 09-01-89, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

09-01-89
Date

CEO
Title

Dixie Chemical Company, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

September 19, 1989
Date

Vice President/General Counsel and Secretary
Title

Dresser Industries
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

M. E. Sexton Jr.
Signature

Sept 25 1989
Date

President
Title

D.S.I. Transports, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

D. W. Mahoney
Signature

8/30/89
Date

Plant Manager
Title

E. I. DU PONT DE NEMOURS & CO., INC.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Richard A. Davis
Signature

September 21, 1989
Date

Richard A. Davis
President
Title

Enterprise Transportation Company, formerly
Cango Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated Aug 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

C. B. Hunt
Signature

31 Aug 89
Date

RESIDENT MANAGER
Title

ETHYL CORPORATION
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature	August 14, 1989 Date

Vice President - Polymers Americas
Title

Exxon Chemical Americas
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 31, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Dennis G. Berryhill
Signature

8-31-89
Date

VICE PRESIDENT - HUMAN RESOURCES
Title

GALVESTON-HOUSTON COMPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Roger C Swift — Signature

Roger C Swift

8-29-89 — Date

Regional Vice President
Title

GATX TERMINALS CORPORATION
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated September 11, 1989 and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

W Bidwell
Signature

9/11/89
Date

Vice President
Title

THE GOODYEAR TIRE & RUBBER COMPANY
Company

Attest:
Patricia A Kemph
Assistant Secretary

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8-7-89, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

8-31-89
Date

Vice President & Chief Financial Officer
Title

Grant Oil Country Tubular Corporation -
Company

Tubular Finishing Works

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

_____ _____
Signature Date

Harry R. Benz

Vice President - Finance &
Chief Financial Officer
Title

Hoechst Celanese Corporation
Company

Signature

Anton H. Witte, Jr.
Vice President
Operations Support & Technical
Title

Hoechst Celanese Chemical Group, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

W H Troxell
Signature

August 31, 1989
Date

W. H. Troxell, Vice President
Title

Jetco Chemicals, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

_____ 8/30/89
Signature Date

VICE PRESIDENT
Title

KSA INDUSTRIES INC
Company

KSA Industries, Inc. has executed this consent decree for:

KSA Industries, Inc., its owners, affiliated, and subsidiary companies Service Transport, Inc., its owners, and affiliated companies all of which agree to discharge obligations under this consent decree on behalf of Bayou Refining Co., Inc. without admitting any liability for any obligations, if any, of Bayou Refining Co., Inc..

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

Philip L. Krug

AUG 23 1989

Date

Executive Vice President

Title

The Lubrizol Corporation

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 7 August 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

H. W. Pflumy
Signature

25 August 1989
Date

Exec. Vice President
Title

Merichem Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Mark Allen _____ September 6, 1989
Signature Date
Mark Allen

Corporate Secretary
Title

The O'Brien Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated Aug 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Nelson A. Hinderer
Signature

Aug 11, 1989
Date

Sr. V.P. Mfg.
Title

Otto Equipment Company
Company

SHERIDAN SITE CONSENT DECRFE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

August 15, 1989
Date

Manager, Environmental Affairs
Title

Paktank Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

_____ September 11, 1989
Signature Date

William C. Grabarek

_____ Attorney
Title

Pearsall Chemical Company,
a subsidiary of Witco Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

October 12, 1989
Date

Senior Vice President, General Counsel and Secretary
Title

Petrolite Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Madelyn A. Reilly

Madelyn A Reilly
Signature

August 31, 1989
Date

Attorney
Title

PPG INDUSTRIES, INC.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Paul B. Nolan
Signature

September 12, 1989
Date

Paul B. Nolan

Group Vice President
Title

Quantum Chemical Corporation, USI Division
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8-7-89, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

12/1/89
Date

President & CEO
Title

Racno Corporation f/k/a
Oncor Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

_____ Signature
John T. Subak

September 1, 1989
Date

Group Vice President
Title

ROHM AND HAAS COMPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Approved as to form
RJB
Legal Department

N.J. Neville
Signature

November 6, 1989
Date

President
Title

Schlumberger Well Services, a division of
Schlumberger Technology Corporation (successor
in interest to the Johnston Company)

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

[signature] 8-18-89 7-18-89

Signature Date

Vice President

Title

Tenneco Polymers, Inc. (Includes Petro-Tex Chemical Corporation for this purpose)

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8/31/89, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:

Signature

August 31, 1989
Date

Assistant General Counsel
and Assistant Secretary
Title

TRW Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the Settlors:
VETCO GRAY INC.*

By: Barry S Kaufman
Signature

August 30, 1989
Date

Barry S. Kaufman
Vice President-Western Hemisphere
Title

VETCO GRAY INC.*
Company

*Successor in interest to Gray Tool Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Robert W. Kent
Signature Robert W. Kent

August 25, 1989
Date

Corporate Vice President - Law,
General Counsel and Secretary
Title

Armco Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated AUG 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Gayle C. Thomen
Signature

AUG. 21, 1989
Date

EXECUTIVE V.P. & CHIEF OPR. OFFICER
Title

AZTEC MANUFACTURING CO.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

Donald L. Stichler

August 28, 1989

Date

Secretary

Title

Best Industries, Inc. for
Varco/Best Flow Products (for Best Industries)

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

WEK Richard W. Fowler 8/24/89

Signature Date

Executive Vice President

Title

Borden, Inc.

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 31, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 31, 1989
Date

President
Title

Boring Specialties, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Charles R. Cunningham Sep 14, 1989

Signature Date

Charles R. Cunningham

Attorney for

Title

Briner Paint Manufacturing Company, Inc.

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8/31/89, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

8/31/89
Date

Assistant General Counsel
Title

Brown & Root, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Gerald K Burger
Signature

September 1, 1989
Date

Vice President/Secretary
Title

Browning-Ferris Industries
Chemical Services, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Michael J. Rudick
Signature

August 30, 1989
Date

Michael J. Rudick

Vice President and General Counsel
Title

Occidental Chemical Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ _____
Signature Date

_____
Title

O.K.P., Inc.,
f/k/a Kyanize Paints, Inc.
_____
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated AUG. 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

AUG. 18 1989
Date

Title

THE B.F. GOODRICH COMPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 25 SEPT. 1989
Signature Date

VICE PRESIDENT
Title

BERWIND RAILWAY SERVICE COMPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7 1989 and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

BATTELLE MEMORIAL INSTITUTE

Paul T. Santilli
Signature

August 30 1989
Date

Paul T. Santilli
Vice President & General Counsel
Title

BATTELLE MEMORIAL INSTITUTE
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

L. L. Hardcastle
Signature

8/16/89
Date

President
Title

Cameron Forge Company,
Successor to Cameron Iron Works, Inc.
Company

SHERIDAN SITE CONSENT DECREE

T... ... has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Vito F. Sassone
Signature

August 21, 1989
Date

Vice President/Treasurer
Title

The Celotex Corporation, successor in business to Philip Carey Manufacturing Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ _____
Signature Date

Rodger M. Miller, President
Title

Charter International Oil Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature	August 22, 1989 Date

Secretary and General Counsel
Title

Chemical Leaman Tank Lines, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated Aug. 31, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 31, 1989
Date

Attorney in Fact
Title

C & H Transportation Co., Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 18, 1989
Date

Vice President - Legal
Title

Crown Central Petroleum Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree regarding the Sheridan Disposal Services site, Waller County, Texas, dated _____, and evidences its agreement thereto by signature of its authorized representative.

A De Minimis Settlor:

August 29, 1989
Date

DAILEY PETROLEUM SERVICES CORP.
successor in interest to
DAILEY OIL TOOLS, INC.

President

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

September 13, 1989
Date

MGR. - CERCLA OPERATIONS
Title

The Dow Chemical Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

TRCoverdale

Signature

Thomas R. Coverdale

August 18, 1989

Date

Director, Manufacturing Peroxygen Chemicals Division

Title

FMC Corporation

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

BY: George Whitten

George Whitten

8/25/99

Date

President

Title

On behalf of

French Ltd. of Houston, Inc.

/p/sher.doc/mm

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, a[illegible] its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

BY George Whitten
George Whitten

8/28/89
Date

PRESIDENT
Title

On Behalf of
French Ltd., Inc.

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

~~By~~ George N Whitten, individually 8/28/89

George Whitten Date

President

Title

Fenn Limited

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Luther P. Hendon August 21st 89
Signature Date

Pres.
Title

Luther P. Hendon
~~Company~~
Luther P. Hendon, Individually

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989 and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Ira J. Cree
Signature
Ira J. Cree

August 25, 1989
Date

President
Title

Gammaloy, Ltd.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

LeRoy Bremanowk 10/9/89

Signature Date

LeRoy Bremanowk.

TREASURER

Title

General Welding Works, Inc

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 10/26/89
Signature Date

Attorney
Title

GULF FORGE COMPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8/7/89, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature	8/18/89 Date

Vice President and General Counsel
Title

Hercules Incorporated
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Burton Dubey
Signature

8/25/89
Date

V.P.
Title

Homco International, Inc.
(for Chance Collar Co.)
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ August 30, 1989
Signature Date

Manager, Environmental Department
Title

Houston Lighting & Power Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 10-6-89

Signature Date

John F. Hall

Vice President

Title

HYDRIL COMPANY

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Gerald Thomas
Signature

8/28/89
Date

Senior Environmental Counsel
Title

Kraft, Inc., successor to
Dart Industries, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated AUGUST 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

John N. Baird
Signature

Aug. 21, 1989
Date

General Counsel & Secretary
Title

Liquid Air Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

September 13, 1989
Date

PRESIDENT
Title

Marlin Valve Company, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 8/28/89
Signature Date

Corporate Controller
Title

ICI Americas Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated Aug 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Philip A. Berns Jr.
Signature

Sept. 14, 1989
Date

President
Title

Jacob Stern & Sons, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 8, 1989 and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 23, 1989
Date

Juan Gomez
Vice President, Finance
Title

Keystone/Anderson, Greenwood & Co.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ August 25, 1989
Signature Date
James H. Vines

Vice President - HESPM
Title

Mobay Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 8/31/89
Signature Date

Environmental Manager
Title

Monsanto Company
Company

SHERIDAN SITF CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors

Signature

8/30/89
Date

Vice President, Environmental Health and Safety
Title

Nalco Chemical Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

M. T. Imay
Signature

August 31, 1989
Date

Assistant Secretary
Title

National Steel Products Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Warren Williams
Signature

September 13, 1989
Date

Loss Control Manager
Title

Oil Field Rental Service Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 8-23-89
Signature Date

E. L. Schlein

Corp. Treasurer
Title

Port Drum Company
(for Drum Service Co., Inc.)
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

H E Handley
Signature

10-26-89
Date

GENERAL MANAGER
Title

PORT TERMINAL RAILROAD ASSOCIATION
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 29, 1989
Date

Vice President
Title

The Quaker Oats Company (Anderson Clayton)
Company

SHERIDAN SITE CONSENT DECREF

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

[illegible] August 28, 1989
Signature Date

Director Environmental Affairs
Title

Reichhold Chemicals Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated September 25, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

25 Sept 89
Date

Senior Attorney, Environmental
Title

Teledyne Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature	August 31, 1989 Date

T. R. Williams

Manager Products Environmental Conservation

Title

Shell Oil Company

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

By: Joe V. Walden
Signature

August 30, 1989
Date

President
Title

SIGMOR NO. 5007, Inc.
(Formerly known as
Mission Petroleum Carriers, Inc.)
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated Aug 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

James a Burt
Signature

9-25-89
Date

V P OPERATIONS
Title

SOUTH COAST TERMINALS INC.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

September 22, 1989
Date

Vice President
Title

Team, Inc. for Allstate Vacuum & Tanks, Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ _____
Signature Date

Vice President
_____
Title

Stauffer Management Co.
_____
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

R. D. Kind Jr.
Signature

Aug 29, 1989
Date

Director - Environmental Affairs
Title

Texaco Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ Signature

SEPTEMBER 14, 1989
Date

PRESIDENT
Title

TEXAS BOLT COPANY
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated [illegible], and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

[illegible] — Signature

[illegible] — Date

[illegible] — Title

Texas Instruments — Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8/11/89, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature	August 11, 1989 Date

President

Title

Texas Iron Works, Inc.

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Robert F. Wells
Signature
Robert F. Wells

August 24, 1989
Date

Vice President and Treasurer
Title

T H AGRICULTURE & NUTRITION CO., INC.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

August 25, 1989
Date

Executive Vice President - Operations
Title

Transcontinental Gas Pipe Line Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Robert A. Lahr
Signature

27 Oct 1989
Date

President
Title

Tuboscope Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

R. Van Mynen 9-25-89
Date

R. Van Mynen
Vice President, Health, Safety and
Environmental Affairs
Title

UNION CARBIDE CHEMICALS AND PLASTICS COMPANY INC.
Formerly UNION CARBIDE CORPORATION
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989 and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Signature

October 14, 1989
Date

Executive Vice President-Operations
Title

Union Pacific Railroad Company (for Missouri Pacific Railroad Company)
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8/4/89, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Harold W. Kahler September 6, 1989
Signature Date

President
Title

United Galvanizing, Inc
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated 8- _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ 8-31-89
Signature Date

ATTORNEY for and
Title
on behalf of:

The Upjohn Company
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

P. X. Masciantonio _____ Sept 19, 1989

Signature Date

P. X. Masciantonio

Vice President -
Environmental Affairs

Title

USX Corporation

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Charles R. Hansen
Signature

8/23/89
Date

Vice President, Environmental Management
Title

Velsicol Chemical Corporation
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

_____ August 23, 1989
Signature Date

B. W. Byrne

CRM

Vice President
Title

Warren Petroleum Company, a division of Chevron U.S.A. Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Robert C Walsh 9-15-89

Signature Date

President

Title

Construction Products Division, W.R. Grace & Co. - Conn.

Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated _____, and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

Ivan Click
Signature

August 30, 1989
Date

Vice President
Title

W. T. Byler Co.,Inc.
Company

SHERIDAN SITE CONSENT DECREE

The undersigned has reviewed the Consent Decree dated August 7, 1989 and evidences its agreement thereto by signature of its authorized representative.

For the De Minimis Settlors:

R.W. Hardwick — Sept. 13, 1989

Signature — Date

Vice President

Title

Wyatt Industries, Inc.

Company

RECORD OF DECISION

FOR

SHERIDAN DISPOSAL SERVICES SITE

WALLER COUNTY, TEXAS

(SOURCE CONTROL OPERABLE UNIT)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DECEMBER 1988

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1445 ROSS AVENUE SUITE 1200
DALLAS, TEXAS 75202

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

Sheridan Disposal Services site, Waller County, Texas

STATEMENT OF PURPOSE

This decision document outlines the selected remedial action for the Sheridan Disposal Services site in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substance Pollution Contingency Plan, 40 CFR Part 300 November 20, 1985.

This decision document describes the remedial action for the Source Control Operable unit. This first operable unit reduces the risks associated with exposure to contaminated materials and addresses the sources of contamination to ground water by treating onsite wastes and soils. The second operable unit will address ground water.

The State of Texas (through the Texas Water Commission) has been provided an opportunity to comment on the technology and degree of treatment proposed by the Record of Decision. The letter describing the State's concurrence with the selected remedy is found in Appendix D.

STATEMENT OF BASIS

This decision is based on the administrative record for the Sheridan site. The index found in Appendix B identifies the items which comprise this administrative record.

DESCRIPTION OF THE REMEDY

Upon review of the information contained in the administrative record, it is EPA's judgment that onsite biotreatment of wastes appears to best serve both statutory and selection criteria in relation to the other solutions evaluated. A detailed description of this remedy and an explanation of how it meets statutory requirements is contained in the attached "Summary of Remedial Alternative Selection."

Waste requiring remediation by Biotreatment shall be defined by the following:

1. All material containing greater than 25 ppm of PCBs. This material includes the sludges contained in the pond and evaporation system;

2. Floating oil and emulsion in the pond and in onsite storage tanks;

3. Affected soil under pond - Affected soil under the pond is defined as soil that is intermixed with sludge or contains greater than 25 ppm of PCBs. The extent of affected soil under the pond will be determined during the remedial design/remedial action.

4. Dike surface soils - This material shall include: 1) oily soil on the inside dike slope between the current sludge level to the highest level the floating oil layer has contacted; 2) Grossly contaminated soil and sludge deposits visible on the dike. At a minimum, this shall include the soil and sludge in the vicinity of the treatment tanks and incinerator in the north-northeastern portions of the dike.

5. The wastes described in items 1-4 above address all wastes containing over 25 ppm of PCBs and/or high concentrations of other organics such as benzene and phenol.

If Biotreatment can reduce the level of PCBs in the residuals to less than 50 ppm, the residuals will be stabilized, returned to the pond and capped. If the concentration of PCBs in the biotreated residuals is greater than 50 ppm, they will be stabilized and returned to a RCRA-compliant landfill in the pond area.

In addition to treating the waste described above by Biotreatment the remedy shall also include the implementation of the actions described below:

- o Install a RCRA-compliant cap over the entire pond and dike area.

- o Install a flexible spur jetty river bank erosion control system in the Brazos River.

- o Monitor ground water quality for a minimum of 30 years.

- o Decontaminate, disassemble and properly dispose of all onsite tanks and processing equipment.

- o Properly dispose of any drums encountered during remediation. Contents of intact drums will be treated onsite or disposed of offsite, depending on the nature of the material.

- o Treat potentially contaminated stormwater and waste-water streams resulting from the waste treatment alternatives, to remove solids, metal, and organic constituents. The treated water will comply with all Federal/State standards for discharge into the Brazos River.

- o Implement institutional controls to preclude use of contaminated ground water and ensure the long-term integrity of the cap.

DECLARATION

The remedy described above is protective of human health and the environment, attains Federal and State applicable or relevant and appropriate requirements and is cost-effective. This remedy satisfies the statuatory preference for remedies that employ treatment that reduces toxicity, mobility or volume as a principal element and utilizes permanent solutions and alternative technologies to the maximum extent practicable.

Because this remedy may result in hazardous substances remaining onsite above health-based levels, a review will be conducted within five years after commencement of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

Date

Robert E. Layton Jr., P.E.,
Regional Administrator

SHERIDAN DISPOSAL SERVICES SITE

WALLER COUNTY, TEXAS

SUMMARY OF REMEDIAL ALTERNATIVE SELECTION

DECEMBER 1988

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3a	Results of Priority Pollutant GC/MS Analyses for for the Source Control RI
3b	Results of Priority Pollutant Sampling, October 1987 for Well Screened in the Unconfined Aquifer
4	Cost Summary of Remedial Alternatives

1. SITE LOCATION AND DESCRIPTION

The Sheridan Disposal Services site is located approximately nine miles north-northwest of the City of Hempstead in Waller County, Texas. The site covers about 110 acres in a 700-acre tract of land which is bordered by the Brazos River to the north and Clark Road to the South (See Figures 1 and 2).

Located at the site are a lagoon (12-22 acres depending on water levels), a 17-acre dike surrounding the lagoon, and a 42-acre evaporation/land irrigation system. An incinerator and a group of nine storage tanks which were used for waste storage and treatment are located on the lagoon dikes. These site features are illustrated in Figure 3.

The predominant land-use within a four-mile radius of the site is agriculture and range land. The only primarily residential area within this four-mile radius is the community of Brown College. This community is made up of approximately 20 residences and is located one and one half miles north of the site. Nearby communities primarily utilize ground water from the Evangeline aquifer to meet their water supply needs.

The site is relatively flat, but slopes gently to the south. It lies within the 100-year floodplain of the Brazos River. However, the lagoon dikes have been built up to an elevation above that of the floodplain.

1.1 SITE HISTORY AND ENFORCEMENT

Sheridan Disposal Services operated as a commercial waste disposal facility form about 1958 to 1984. A wide variety of organic and inorganic chemical and solid wastes were disposed of at the site. The facility treated waste by steam distillation, open burning and incineration. The lagoon was developed in a low-lying area of the site and was used as a holding pond, and for the disposal of overflow wastes and waste treatment residues. In 1976, the facility initiated use of the evaporation system for disposal of water which accumulated on the lagoon.

The site's regulatory history began in 1963 when the Texas Water Quality Board (now known as the Texas Water Commission) issued a permit authorizing disposal of industrial solid waste. After permitting, the Texas Water Quality Board (TWQB) received complaints concerning odor, runoff and oil in the Brazos River. The State also noted increased concentrations of contaminants in on-site monitoring wells.

In 1970, the TWQB and Waller County filed suit against the Sheridan facility. After a series of meetings and public hearings, in 1975, a judgement was entered by the Court which prohibited further discharge of wastes into the lagoon. The TWQB and Sheridan Disposal Services discussed numerous closure plans for the lagoon until the TWQB determined that the facility did not have the economic or technical resources necessary to close the lagoon properly. In 1984, the Texas Department of Water Resources (successor of the TWQB) sent letters to generators and transporters of waste managed at the site to notify them of their potential liability under CERCLA.

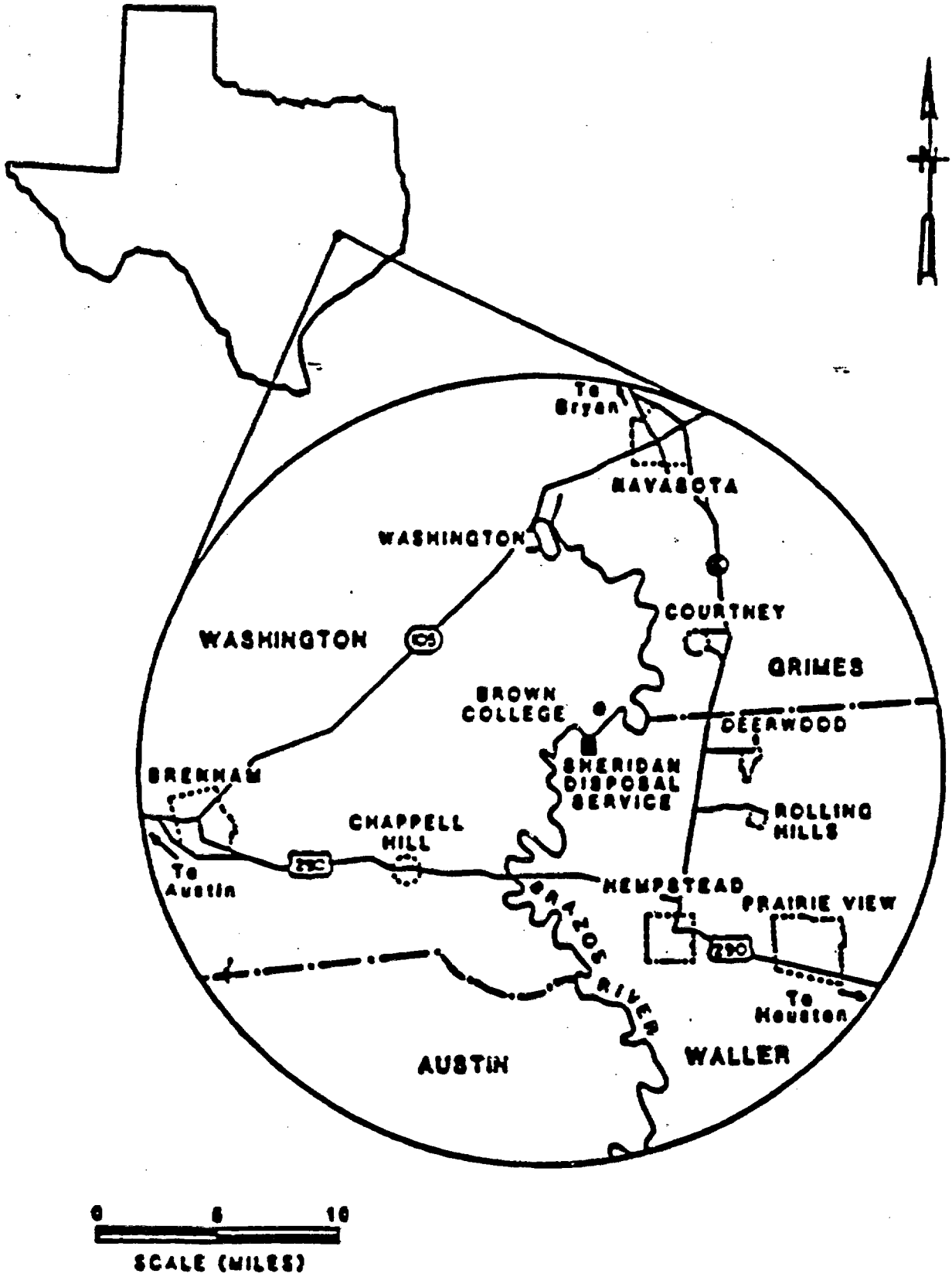

FIGURE I
SITE LOCATION MAP
SHERIDAN DISPOSAL SERVICE

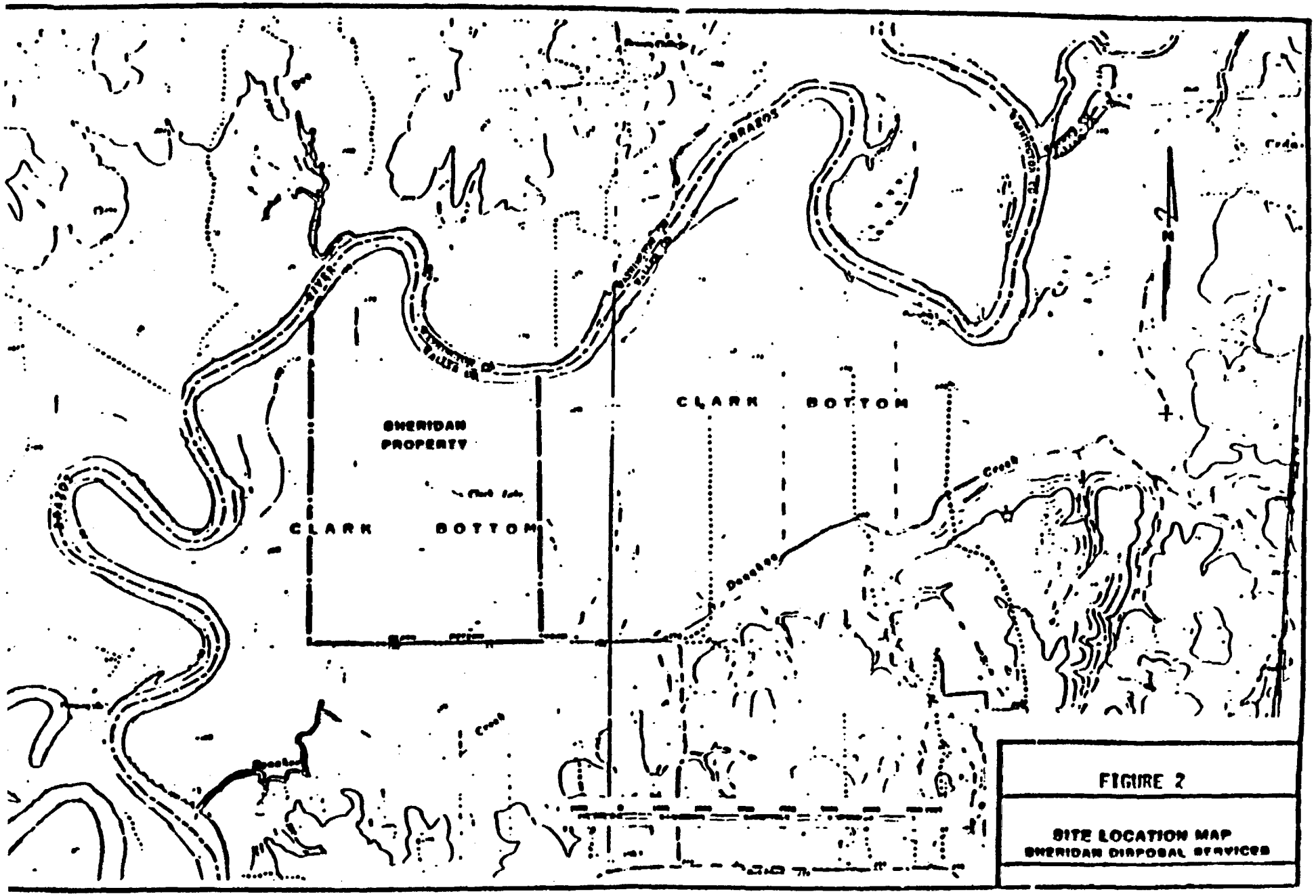

FIGURE 2

SITE LOCATION MAP
SHERIDAN DISPOSAL SERVICES

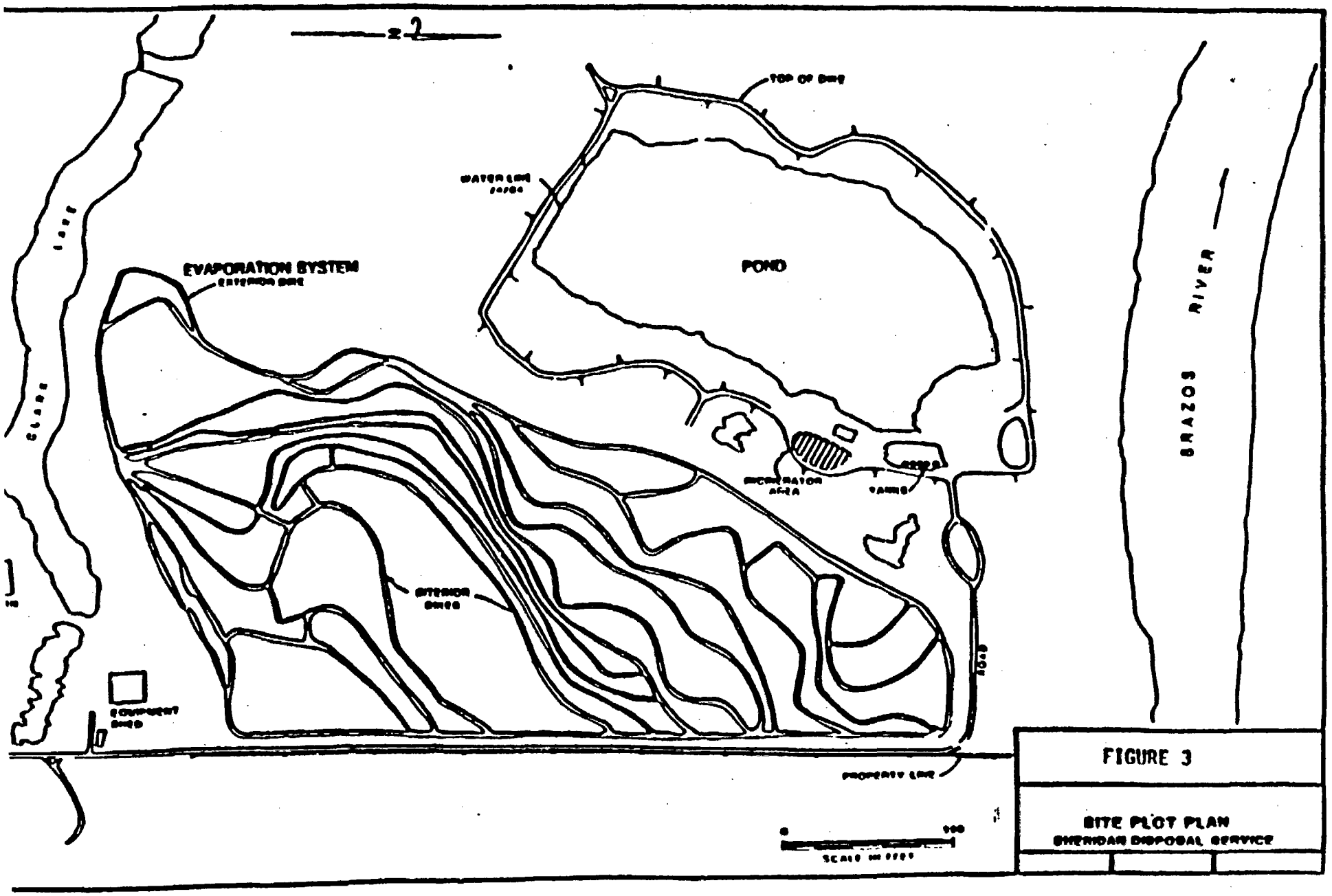

FIGURE 3

SITE PLOT PLAN
SHERIDAN DISPOSAL SERVICE

In response to this notification, the Sheridan Steering Committee, which is now known as the Sheridan Site Committee, organized and began to investigate the extent of contamination at the site. After polychlorinated biphenyls (PCBs) were identified in the lagoon, EPA became directly involved in site closure through the Toxic Substances Control Act (TSCA). The site was ranked according to the Superfund Hazard Ranking System and on June 10, 1986, the site was proposed for inclusion on the National Priorities List.

In June and July of 1986, 102 Notice/Information request letters were sent to site Potentially Responsible Parties (PRPs). During this time, the Sheridan Site Committee submitted a Remedial Investigation to EPA for evaluation. After reviewing this document the Agency determined that additional field investigations would be necessary to obtain adequate information on which to base a ground water cleanup decision. However, in order to expedite lagoon cleanup and reduce further leaching into ground water, the site was divided into two operable units, a Source Control unit which is addressed in this ROD and a Ground Water Migration Management (GWMM) unit which will be addressed in a later ROD.

On February 3, 1987, 59 companies who were members of the Sheridan Site Committee entered into an Administrative Order on Consent with EPA to complete both the Source Control and GWMM RI/FSs. In 1988, EPA issued a unilateral order to site PRPs to lower the level of water in the lagoon. This action was implemented by the Committee's contractor with EPA oversight.

1.2 GEOLOGY

The Sheridan site lies on the Brazos River Alluvium of recent age, which is comprised of gravel, sand, silt and clay deposited by the meandering river. The Brazos River Alluvium unconformably overlies the Miocene-aged Fleming formation. The Fleming is made up of interbedded sand and clay layers. Table 1 provides a general description of the hydrogeologic units present in Waller and Austin counties. Please note that all formations from the Goliad sand to the Beaumont clay are not present beneath the site.

According to the Austin sheet of the Geologic Atlas of Texas, no faults with surface expression occur in the vicinity of the site. Field investigations conducted by the responsible parties' contractor verified this conclusion. The Hockley escarpment and Salt Dome are found about 18 miles south of the site and the Millican fault zone lies approximately 20 miles to the north. However, there is no evidence that these features influence the hydrogeology of the site.

1.3 HYDROGEOLOGY

The alluvium of the Brazos River forms the first Regional aquifer beneath the site. The Evangeline and Jasper aquifers underlie the alluvium. Most wells in the vicinity of the site tap the Evangeline aquifer, which is about 450 feet thick beneath the site.

Table 1

Geologic description and water-bearing properties of the geologic units forming the aquifers in Austin and Waller Counties

Aquifer	Stratigraphic unit	Estimated thickness in area (feet)	General composition in Austin and Waller Counties	Surface expressions	Water-bearing properties in Austin and Waller Counties
Alluvial	Tributary alluvium and flood-plain alluvium of the Brazos River	0- 80	Unconsolidated gray, brown, and reddish-brown clay, silt, and sandy clay, commonly overlying light-colored sand or coarser-grained sand and gravel.	Occurs along the banks of smaller streams and in the flood plain of the Brazos River. Nearly flat plain. Forms reddish to dark-brown and black soils.	Yields small to large amounts of fresh water in the flood plain of the Brazos River.
Beaumont	Beaumont Clay	0- 75	Mottled red, reddish-brown, brown and gray, dense clay with white calcareous nodules. May contain lenses of fine and medium-grained sand or sand and gravel in places.	Occurs only along the fringes of the Brazos River flood plain. Forms nearly flat, narrow plain. Soils are gray to black, blocky.	Yields small to moderate amounts of water to scattered shallow wells less than 100 feet deep along the edge of the Brazos River flood plain.
Beaumont	Montgomery Formation	0- 40?	Light gray to light brown, fine-grained sand, silt, and clay, probably grading with depth to darker-colored coarser sand and in places basal sand and gravel.	Nearly flat, featureless plain; soils are light colored, fine-grained sandy. Occurs only along southern edge of area.	Yields small amounts of water to scattered shallow wells.
Beaumont	Bentley Formation	0- 50?	Alternating beds of reddish-brown to yellow and gray, mottled clay interbedded with greyish, fine- to coarse-grained sand and gravel lenses. Scattered lenses of lime-cemented sandstone. Clay, sandy clay, and fine sand predominate in the upper part, darker-colored coarser sand and gravel in the lower part.	Forms flat plains in the southern one-third of the counties; most of the fine-grained area is on the outcrop. Forms light-colored sandy loam soils.	Contributes small to moderate amounts of fresh water to domestic wells in the southern part of the area; probably represented by the apparent sand encountered in these wells.
Beaumont	Willis Sand	0- 240?	Alternating beds of mottled red, yellow, brown, and gray clay and sand with scattered lenses unsorted sand and quartz gravel. Ferruginous nodules common. Packed and hard in fresh exposures. Basal part is usually a hard, gravelly sand and clay.	Forms the gently-rolling sand hills of northern Waller County and central Austin County. Most of the gravel pits in Austin County are in the basal Willis. Forms tan sandy soils.	Yields small to large amounts of fresh water to wells.
Beaumont	Goliad Sand	0- 640?	White to gray, sticky, calcareous clay with interbedded lenses of light-colored, gravelly sand and lime-cemented sandstone. Black chert grains in the whitish sand give a salt and pepper effect.	Occurs as isolated surface exposures because the Goliad is overlapped by the Willis Sand or is easily removed by erosion. Forms gray, sticky soils. Usually occurs along valley bottoms and walls.	Yields large amounts of fresh water to wells.
Beaumont / Curtis Aquiclude	Fleming Formation	0-1,700	Interbedded clay and sand; clay predominantly in the upper part. The blocky, dense clay is various shades of gray, yellow, olive, and brown. White calcareous nodules are common. Sand is gray to brown, brown, interbedded with gray clay. Sand is medium to fine grained and often cross-bedded.	Forms the rolling and dissected topography of northern Austin County. Forms gray to black loam and sandy loam soils.	Yields small to large amounts of fresh to slightly saline water.
Jasper	Catahoula Sandstone	?	Alternating beds of gray clay, tuff, and sand. Lower sands may be hard, white, and have opaline appearance.	Does not crop out in Austin or Waller Counties. Difficult to distinguish from overlying Fleming Formation in both surface exposures and in well logs.	May yield small amounts of fresh water in the most northern part of Austin County. Generally water is at least slightly saline.
Jasper	Undifferentiated	—	Alternating beds of gray sand, sandstone, and shale.	Does not crop out in Austin or Waller Counties.	Would yield only saline water.

Source: Texas Water Development Board, Report 61

Figure 4 describes a general cross-section of site hydrogeology. The first water-bearing unit, which is referred to as the water table aquifer, is identified in the cross-section as Stratum B. This aquifer is part of the sediments of the Brazos River Alluvium. The second water-bearing unit, know as the confined aquifer, is identified as Stratum D. This unit is part of the Evangeline aquifer. The clay layer know as Stratum E lies beneath the confined aquifer at about 100 feet in depth and was the deepest unit investigated at the site.

Ground water in the water table and confined aquifers generally flows towards the river, in a northwestern direction. However, during high river stage conditions (less than one third of the time) ground water flow in the water table aquifer may shift to the west and south. The predominant vertical hydraulic gradient is upwards towards the water table aquifer.

1.4 SITE INVESTIGATION RESULTS

A. Soil and Sludge

Extensive sampling of the site has focused on areas which are in close proximity to visible waste or were known to have received waste. Those areas include the lagoon, lagoon dikes and the evaporation system. Samples were also obtained from unaffected soils (background) on site, and water and sediment from the Brazos River and Clark Lake. A detailed description of this information may be found in the site RI/FS and Risk Assessment. A summary of the site data is found in Tables 2a and 2b.

Sludges in the lagoon range in thickness from about six inches to three feet. A water layer floats on top of the sludge and the water is covered in part by a thin oil and emulsion layer. The highest levels of contaminants detected at the site were found in the lagoon sludge.

The most significant classes of compounds found in the sludge in terms of concentration and toxicity include volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs). The highest concentrations of benzene and toluene (two VOCs) detected are 2500 ppm and 36,600 ppm, respectively. The highest concentration of PCBs found at the site is 223 ppm. High levels of base neutral compounds such as napthalene and phenols were also detected in the lagoon sludge. Of the heavy metals present, zinc was found at the highest levels (13,800 ppm).

The majority of the contamination identified in the evaporation system is found in isolated sludge deposits near the point of discharge from the lagoon to the evaporation system. Contaminants in the evaporation system sludge are similar to those in the lagoon but at lower concentrations. The remainder of evaporation system soils are generally characteristic of local background soils.

Sampling of the dike indicates that it contains a layer of affected soils and sludge at about three feet below the surface. Concentrations of con-

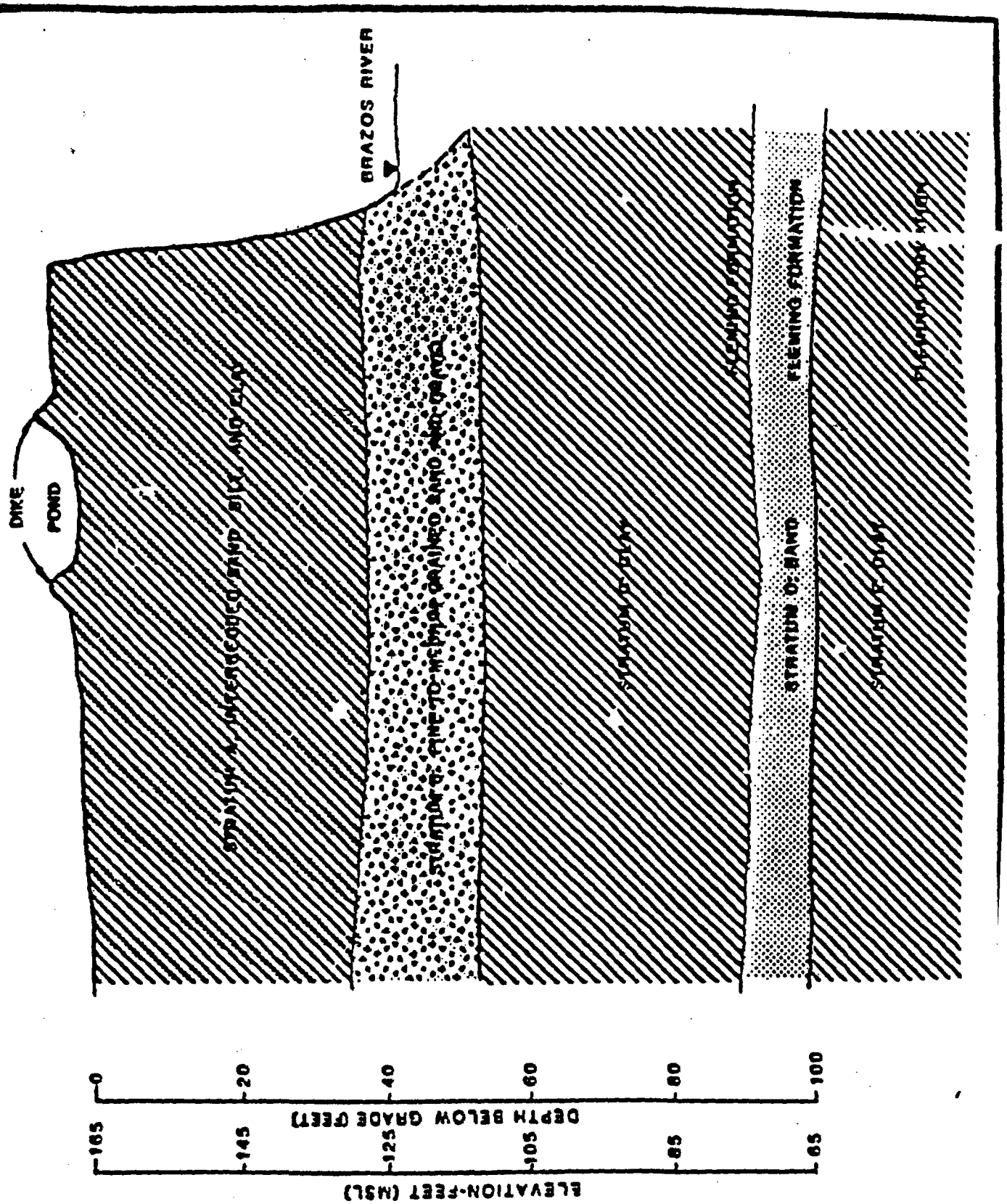

FIGURE 4

GENERAL SCHEMATIC SITE GEOLOGY

SHERIDAN DISPOSAL SERVICE

TABLE 7a

Summary of Organic Compounds Detected On-Site
Sheridan Disposal Services Site

Parameter	Pond Water: DEC Data July 1986	Pond Water: SDS Data 08/10/87 08/31/87	Floating Oil and Emulsion: SDS Data 07/31/87	Pond Sludge: DEC Data Composite Samples 01/30, 6	Pond Sludge: SDS Data Composite Samples 08/30/86	Pond Sludge: SDS Composite Data 08/31/87	Soil Gas Data 07/6-08/87	Compensation System Sludge Deposits and Soils: DEC Data December 1985	Compensation System Sludge Deposits and Soils: SDS Data 08/24-29/87	Background Soils: DEC Data December 1985
	(ug/l)	(ug/l)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	
Volatile Fraction										
Acetone	nd	<0.010	<5.0	nd	nd	<250	<0.010-10	nd	nd	nd
Benzene	<0.005	<0.005	<0.75	<400	<2.000	<170	<0.005-240	<0.022-87.0	<0.005 3	<0.033
2-Butanone (MEK)	nd	<0.010	<5.0	nd	nd	<250	<0.010-5	nd	nd	nd
Carbon disulfide	nd	<0.005	<0.75	nd	[illegible]	<40	<0.005-10	nd	nd	nd
Chlorobenzene	<0.50	<0.005	<0.75	nd	<250	<40	<0.005-0.5	<0.00-130.0	<0.005- 14	<0.030
1,2-Dichloroethane	<0.50	<0.005	<0.75	nd	<250	<40	<0.005-44	<0.010-114.0	<0.005- 14	<0.014
1,1-Dichloroethylene	<0.50	<0.005	<0.75	nd	<250	<40	<0.005-0.37	<0.010-114.0	<0.005- 14	<0.014
Ethylbenzene	<0.500	<0.005	0.5	240	<0.400	500	<0.005-400	<0.030-300	<0.005 10	<0.014
2-Hexanone	nd	<0.010	<5.0	nd	nd	<40	<0.010-0.35	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	nd	<0.010	<5.0	nd	nd	<40	<0.010-73	nd	nd	nd
Methylene chloride	<0.50	<0.010	<5.0	nd	<250*	<250	<0.010-25	<0.010-0.301	<0.010- 73	<0.014
Styrene	nd	<0.005	<0.75	240	nd	500	<0.005-210	nd	nd	nd
Tetrachloroethylene	0.01	<0.005	<0.75	60	250	51	<0.005	<0.010-45.5	<0.005-.14	<0.031
Toluene	0.01	<0.120-0.005	0.75	5.700	<24.000	700	<0.005-400	<0.010-203	<0.005 67	<0.014
Trichloroethylene	0.01	<0.005	0.75	200	<250	<40	<0.005	<0.0005-<0.50	<0.005-.14	<0.0005
Xylenes*	nd	0.002-0.007	3.3	3.700	nd	1000	<0.005-210	nd	nd	nd
Acid Fraction										
2,4-Dimethylphenol	<0.50*	<0.010	<400	500	330	400	<0.33-87	<0.00-404	<0.33-<33	<0.09
Phenol	2.50-18.0(est)	<0.010	<400	1,100	1,300	<1000	<0.33-400	0.334-1,070	<0.33-44	<0.09
2-methyl phenol	nd	<0.010	<400	190	nd	300	<0.33-81	nd	nd	nd
4-methyl phenol	nd	<0.010	<400	nd	nd	400	<0.33-170	nd	nd	nd

nd - not detected
nd - not tested
* - Compound tentatively identified but not quantified (below detection limit).
(est) - Composite sample collected March 30, 1984

TABLE 2a cont.

Summary of Organic Compounds Detected On-Site
Sheridan Disposal Services Site

Location	Pond Sediments		Floating Oil and Emulsion	Pond Sludge				Impoundment System Sludge Deposits and Soils		Background Soils
				Oil Data		Oil Composite Data	Soil			
	Oil Data July 1988	Soil Data 05/16/87	Oil Data 07/26/87	Composite Samples 05/27/04	05/30/04	06/30/07	Grab Samples 07/0-10/07	Oil Data December 1988	Soil Data 05/24-25/87	Oil Data December 1988
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Base/Neutral Fraction										
Acenaphthene	<0.050	<0.010	<100	nd	<33	<1300	<0.33-170	<0.063-<0.700	<0.33-<33	<0.063
Anthracene	<0.050	<0.010	<100	[illegible]	33	<1300	<0.33-<33	<0.063-<0.700	<0.33-<33	<0.063
Bis-(2-ethylhexyl) phthalate	<0.050	<0.010	500	nd	<33*	<1300	<0.33-<0.8	<0.330-<30.000	<0.33-77	<0.033
Butyl benzyl phthalate	<0.050	<0.010	110	nd	<33	<1300	<0.33-<3	<0.330-<30.000	<0.33-36	<0.033
Chrysene	<0.050	<0.010	<100	nd	<33	<1300	<0.33-<0.7	<0.063-<0.000	<0.33-<33	<0.063
Dibenzofuran	nd	<0.010	<100	nd	nd	<1300	<0.33-<100	nd	nd	nd
Diethyl phthalate	<0.050	<0.010	<100	nd	<33	<1300	<0.33-33	<0.330-<30.000	<0.33-<33	<0.33
Di-n-octyl phthalate	<0.050	<0.010	<100	nd	<33	<1300	<0.33-0.8	<0.330-<30.000	<0.33-60	0.<33
Fluoranene	<0.050	<0.010	<100	nd	99.4	<1300	<0.33-67	<0.063-<0.700	<0.33-<33	<0.063
Naphthalene	0.077	<0.010	<100	nd	99.8	<1300	<0.33-<33	<0.063-<0.000	<0.33-<33	<0.073
2-methylnaphthalene	nd	<0.010	<100	<100	nd	330	<0.33-300	nd	nd	nd
Naphthalene	<0.050*	<0.010	<100	0.10	0.1	200	<0.33-67	<0.063-<0.000	<0.33-<33	0.<33
N-nitrosodiphenylamine	<0.050	<0.010	<100	nd	<33	<100	<0.33-34	0.070-<0.700	<0.33-<33	<0.063
Phenanthrene	<0.050	<0.010	<100	nd	<1.0	<1.10	<0.33-<33	<0.000-<30.000	<0.33-<33	<0.100
Pesticides										
Alpha-BHC	<0.05	<0.005	<0.5	nd	<33	<0.04	<0.000-0.4	<0.330-<30.000	nd	<0.33
Gamma-BHC	<0.05	<0.005	<0.5	nd	<33	<0.04	<0.000-0.00	<0.330-<30.000	nd	<0.33
4,4'-DDD	<0.05	<0.01	<3.3	nd	<33	<1.3	<0.010-1.3	<0.000-<0.000	nd	<0.06
4,4'-DDE	<0.05	<0.01	<3.3	nd	<33	<1.3	<0.010-0.70	<0.000-<17.000	nd	<0.10
4,4'-DDT	<0.05	<0.01	<3.3	nd	<33	<1.3	<0.010-3.1	<0.000-<0.000	nd	<0.001
Dieldrin	<0.05	<0.01	<3.3	nd	<33	<1.3	<0.010-0.70	<0.000-<7.000	nd	<0.001
PCB's										
Aroclor 1016	<0.05	<0.010	<10	nd	<0.3	35	<0.00-<00	<0.3-<100.000	<0-<00	<1.3
Aroclor 1221	<0.05	<0.010	<10	nd	<0.3	<0.6	<0.00-31	<1.3-<100.000	<0-<00	<1.3
Aroclor 1242	<0.05	<0.010	31	0.03.33-0.04(c)	310	<0.4	<0.00-0.0	<1.3-<100.000	50-36	<1.3
Aroclor 1260	<0.05	<0.010	<33	0.4 0-70(c)	<0.3	13	<0.00-30	<1.3-<100.000	100-<33	<1.3
Total PCB's	<30 (b)	nd	nd	133-330	nd	nd	nd	nd	nd	

nd - not detected
nq - not tested
* - compound tentatively identified, but not quantified (below detection limits).
(b) - PCB data reported in lab backup April 11. Used for floating oil samples (01. 1988)
(c) - individual samples analyzed for PCBs only.

taminants of concern in this layer are generally at least ten times less concentrated than those found in the lagoon. Surface contamination is also visible on the dike. This contamination is most pervasive in the tank and incinerator area of the dike. The extent of this contamination on the dike was not determined during the RI/FS; however, confirmatory sampling during remedy implementation will verify that all contamination above the action level is addressed by the remedial action.

The cost estimates developed for the alternatives used a common design based on the following estimated waste volumes:

Pond sludge	30,000 yd^3
Affected soil under pond	10,000 yd^3
Evaporation System Sludge	1,000 yd^3
Oily-dike surface soil	3,000 yd^3
Floating Oil & Emulsion	300 yd^3

These estimates are based on a 25 ppm PCB cleanup level as well as a visual estimate of highly contaminated soils and wastes.

B. Surface Water

Sampling of the Brazos River downstream and upstream of the site indicated that there was no measureable difference between the downstream and upstream samples. Sediment samples were also obtained from the river bottom at locations downstream and upstream of the site. Concentrations of organic constituents indicated that the site had not impacted the sediment however, concentrations of metals were slightly higher in the downstream sample than the upstream sample. Analyses of Clark Lake water and sediments do not exhibit elevated levels of site contaminants.

C. Ground Water

Over thirty wells have been installed at the site in both the shallow and deep aquifers to determine the extent of contamination and evaluate site hydrogeology. Tables 3a and 3b show the highest levels of contaminants detected in the shallow wells to date. No contamination has been detected in the deep aquifer. The only group of contaminants identified in the shallow ground water are volatile organics. The highest concentration of contaminant detected during recent sampling was benzene, at 0.027 ppm. The Ground water Migration Management RI/FS is ongoing, and the Record of Decision for the Ground Water operable unit is expected to be completed by September 1989. However the remedy for the Source Control operable unit described in this Record of Decision will be fully consistent with the ultimate remedy for the site.

TABLE 2b

SUMMARY OF METALS DETECTED ON SITE
[illegible] DISPOSAL DECOMMISSIONED

Metal	Pond Water: 01, 1987 (a)	Pond Water: Sum 03/30/87	Pond Sediment: 01, 1987 (b)	Pond Sediment: Sum Composite 03/23/87	Seepage Basin Leachate 041 March 1984 (c)	Dike Soils Sum 7/8-10/87	Evaporation System Water 041 03/30/87	Evaporation System Soils: Total 01, 1987 (d)	Evaporation System Soils: Leachate Pond September 1979	Background Soils: Total 041 December 1980	Background Soils: Leachate Pond 03/23/79 (c)
	(mg/l)	(mg/l)	(mg/kg)	(mg/kg)	(mg/l)	(mg/kg)	(mg/l)	(mg/kg)	(mg/l)	(mg/kg)	(mg/l)
Aluminum	nd	0.15-0.35	2050-8700	3500	nd	nd	nd	9,450-7,000	nd	nd	nd
Arsenic	<0.010-0.025	0.010-0.01	<2-2	30	<0.01	nd	<0.010	10-65.1-3	nd	nd	nd
Barium	<0.50-0.6	0.15-0.15	1000-007.4	830	<0.50	nd	<0.50	40-830	nd	nd	0.030
Beryllium	nd	<0.005	0.5	<0.5	nd	nd	nd	0.25-0.5	nd	nd	nd
Boron	nd	nd	50-95	nd	nd	nd	nd	40	nd	nd	nd
Cadmium	<0.010-0.020	<0.005	0.6-2.5	2.5	<0.01	nd	<0.010	10.05,0.75-30.4	<0.010	nd	<0.010
Calcium	0.05-1.75	50-75	nd	5300	nd	nd	nd	95.0-03.4	nd	nd	0.01
Chromium	0.20-3.37	0.01-0.05	10-202	100	<0.01	0-40	<0.010	41.40-207.0	nd	0.5-30.1	<0.02
Cobalt	nd	<0.01	3.5-5	5	nd	nd	nd	3.5-6.57	nd	nd	nd
Copper	0.20-2.90	<0.01-0.020	15-300	150	nd	nd	0.02-0.04	5-41.6	nd	nd	0.010
Iron	20.2	0.30-0.40	4370-9440	4300	nd	nd	11.5-20.5	1,000-5,070	nd	nd	nd
Lead	<0.10-0.60	<0.005	<3-337.1	310	<0.01	<3-4300	<0.010	3-041.0	<0.050	<1-33.1	<0.050
Magnesium	5.50-5.5	20-30	nd	930	nd	nd	nd	3.37-6.06	1.00	nd	0.1
Manganese	3.97	0.30-0.41	140-340	71	nd	nd	0.00-1.00	103-341	nd	nd	nd
Mercury	<0.005	<0.0005-0.001	<1	0.06	<0.005	nd	<0.005	nd	nd	nd	0.00005
Nickel	0.150-0.30	<0.040	32-90	60	nd	5-30	<0.040-0.50	31.03-41.0	nd	0.5-24.6	0.01
Potassium	nd	73-81	nd	<500	nd	nd	nd	1.7-3.6	nd	nd	nd
Selenium	<0.010	<0.005-0.005	<3	0.6	<0.01	nd	<0.010	0.3	nd	nd	nd
Silver	<0.010-<0.3	<0.005	<3	<50	<0.01	nd	<0.01-0.11	nd	nd	nd	nd
Sodium	nd	253-330	nd	3500	nd	nd	nd	4.9-17.6	nd	nd	0.00000
Vanadium	nd	<0.01-0.112	30	25	nd	nd	nd	30	nd	nd	nd
Zinc	0.200-0.6	<0.03-0.040	115.0-13006	970	nd	10-2000	0.01-0.03	13.9-1,270	nd	23.1-36	0.03

nd - not tested

(a) - Ranges include data from RWQB (October 1979, September 1980, April 1979, February 9, 1980) and DEE (March 20, 1984) samples

(b) - Ranges include data from RWQB (March 1980), EPA DEE - on samples (July 1983) and a composite sample by DEE (March 20, 1984)

(c) - Reported in the 1987 DI; see Tables 3-7 and 3-8 for ..6 and RWQB leachate data respectively, Appendix 3A for RWQB leachate (Sept. 1979). Note that background evaporation system soil leachate of 10/79 is only one sample point and leachate procedure not well documented. Therefore, data may not be representative.

(d) - Ranges include data from EPA DEE Seep sample (July 1983) and DEE sample (March 20, 1984).

TABLE 3a

Results of Priority Pollutant GC/MS
Analyses for the Source Control RI
Sheridan Disposal Services Site

Well Number:		MW-3	MW-6	MW-16	MW-3	MW-7	MW-14
Date Sampled		6/29/84	6/29/84	6/29/84	6/29/84	6/29/84	12/19/85
Aquifer		Unconfined	Unconfined	Unconfined	Confined	Confined	Confined
Parameter	Units						
Volatiles							
Chlorodibromomethane	ppb	11	ND	ND	ND	ND	ND
Chloroform	ppb	60	ND	ND	ND	ND	ND
Dichlorobromomethane	ppb	61	ND	ND	ND	ND	ND
Methylene Chloride	ppb	ND	ND	ND	BdDL (<10)	ND	5 J[1]
1,1,1-Trichloroethane	ppb	11	ND	ND	ND	ND	ND
Acid Extractable Fraction	ppb	ND	ND	ND	ND	ND	ND
Base/Neutral Extractable Fr. .ion							
Bis (2-Ethylhexyl) Phthalate	ppb	BdDL (<10)	BdDL (<10)	BdDL (<10)	ND	10 [1]	ND
Isophorone	ppb	30	ND	BdDL (<10)	ND	ND	ND

NOTES:

ND = Not Detected.

BdDL = Tentatively identifie at concentrations below method detection limits.

[1] = False positive result, since laboratory blank sample analyzed positive for these compounds.

TABLE 3h

Results of Priority Pollutant Sampling, October 1987 for Wells Screened in Unconfined Aquifer
Sheridan Disposal Services (ppb)

Well Number	005	013	004	021	002	001	014	015	020	017	018	024	012
Date Sampled	MW-10 10/27/87 Upgrad.	MW-12 10/28/87 Upgrad.	MW-6 10/27/87 Downgrad	MW-18 10/28/87 Downgrad	MW-19 10/27/87 Downgrad	MW-29 10/27/87 Downgrad	MW-31 10/28/87 Downgrad	MW-32 10/28/87 Downgrad	MW-34 10/28/87 Downgrad	MW-36 10/29/87 Downgrad	MW-37 10/29/87 Downgrad	MW-38 10/30/87 Downgrad	MW-39 10/28/87 Downgrad
Constituents													
VOLATILE ORGANICS													
Benzene	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	27(5)	ND(5)	ND(5)	ND(5)	ND(5)
Tetrachloroethene	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	13(5)	21(5)	ND(5)
trans-1, 2-Dichloroethene	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	25(5)	ND(5)	5.2(5)	ND(5)	ND(5)
Trichloroethene	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	15(5)	ND(5)	ND(5)	13(5)	ND(5)
BASE/NEUTRAL/ ACID EXTRACTABLE ORGANICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PESTICIDES/ PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
METALS													
Arsenic	ND(.003)	ND(.003)	.007(.003)	ND(.05)	ND(.003)	.005(.003)	.006(.003)	ND(.003)	ND(.003)	ND(.003)	ND(.003)	ND(.003)	.043(.003)
Copper	ND(.006)	.012(.006)	ND(.006)	ND(006)	ND(.006)	ND(.006)	ND(.008)	ND(.006)	ND(.006)	ND(.006)	ND(.006)	.006(.006)	ND(.006)
Selenium	ND(.004)	ND(.004)	ND(.002)	ND(.004)	ND(.004)	ND(.004)	ND(.004)	ND(.032)	ND(.002)	.01(.004	ND(.004)	ND(.004)	ND(.004)
Zinc	.04(.01)	.06(.01	.05(.01)	.07(.01)	.06(.01)	.02(.01)	.07(.01)	.05(.01)	.06(.01)	.07(.01)	.04(.01)	.11(.01)	.04(.01)

Notes:
ND = Not Detected
Detection Limits in Parentheses

D. Air

Extensive air sampling has been completed at the site. No priority pollutant constituents were detected at concentrations above ambient background levels.

1.5 TREATABILITY TESTING

While generally available information will give an indication of the potential applicability of a given remedial technology, performance of actual laboratory tests using site-specific materials is often a better method for determining the appropriateness of a remedial technology. For this reason, treatability studies were performed at the Sheridan site. The Sheridan Site Committee elected to undertake studies to evaluate the applicability of Biotreatment, Solvent Extraction and Stabilization technologies to treat site wastes. The results of these studies are presented in Appendices B, C and D of the FS and summarized below.

The Sheridan Site Committee conducted stabilization tests on samples of sludge obtained from the lagoon. Sludge was stabilized by Committee consultants using fly ash and samples were also sent to two stabilization vendors, Enreco and Soliditech for stabilization using their proprietary methods. Fly ash alone was not found to result in a stabilized waste with sufficient structural strength to support earth moving equipment during the construction of a cap.

The proprietary methods improved compressive strength characteristics but leaching tests of the stabilized wastes indicated significant levels of volatile organic compounds such as benzene in the leachate. The Site Committee has also conducted additional stabilization testing which will be discussed in the Responsiveness Summary.

Two phases of biotreatment studies were conducted by the Sheridan Site Committee. Samples of lagoon sludge were placed in aqueous bioreactors containing organism seed materials. Soil obtained from the edge of the lagoon, sludge from an industrial waste treatment lagoon and proprietary seed from General Electric and Microbe Masters were used as sources of microorganisms in the experiments. The reactors were generally operated under aerobic conditions and sufficient nutrients (nitrogen, phosphorus) were added as necessary to maintain the microorganisms.

Sampling of the reactors was conducted after 71 days and semiquantitative mass balances were conducted to evaluate the amount of contaminant removal which occurred. This analysis indicated that essentially all the volatile organics present in the sludge were removed and at least 84 percent of the semi-volatile organics were degraded. The amount of organic reduction due to volatilization was not determined in the studies. The PCB removal results were less clear due to high PCB detection levels and variable original PCB content of the sludge, but they suggested that some PCB reduction had occurred.

A sample of lagoon sludge was sent to the Resources Conservation Company for treatment using their proprietary "B.E.S.T" solvent extraction techniques. In this method, the sludge is separated into three distinct phases, oil, solids and water. The PCBs and other organic constituents are concentrated in the oil which is then treated by methods such as incineration or chemical dechlorination. The metals present were concentrated in the solid phase. This method was found to effectively segregate PCBs into the oil layer and the solids generated would probably not require disposal as a hazardous waste.

1.6 POTENTIAL IMPACTS OF THE SITE ON HUMAN HEALTH AND ENVIRONMENT

The assessment of risk posed by the Sheridan site was evaluated in the Sheridan Risk Assessment. This assessment examined the amount, concentration, properties, and environmental fate and transport of chemical found at the site; the populations and environments potentially at risk; exposure pathways; and potential exposure events. The document described the risks associated with current and future (probable and worst-case) exposure scenarios. The numerical cancer risk values discussed below are theoretical quantifications of the excess lifetime cancer risk, that is, the increased probability of contracting cancer as a result of exposure to wastes, compared to the probability if no exposure occurred. For example, a 10^{-6} excess cancer risk represents an exposure that could result in one extra cancer case per million people exposed.

Under current conditions which assume restricted site access and maintenance of the site, the only potentially significant pathway is migration of contaminants into the Brazos River. This pathway was modelled using very conservative assumptions, resulting in an upper bound excess cancer risk from the ingestion of PCBs in fish of 1.5×10^{-5}. Modelling using less conservative assumptions indicated that the 1×10^{-6} excess cancer risk would not be exceeded.

Both models utilized are relatively conservative. However, neither model is capable of accounting for processes such as sorption to colloids and enhanced solubility due to co-solvent effects, which are recognized as facilitating the transport of PCBs in ground water. Although these processes cannot be accounted for by modelling, they increase the potential for PCBs to affect the river.

The second scenario evaluated was the most probable future land use which assumed continued agricultural (rangeland) land use and unrestricted access to the waste disposal area. Under this scenario, there are two major exposure pathways in addition to the ground water transport pathway described in the current scenario. These pathways are 1), direct contact (ingestion and dermal absorption) with sludge and 2), release of all site wastes into the Brazos

River due to the eventual erosion and failure of the river bank between waste and the river.

The total excess cancer risk due to direct contact with site sludge was calculated to be about 7×10^{-5}. The risk associated with the river bank erosion scenario was not quantified because it is impossible to accurately predict the rate of erosion, subsequent bank failure and release of contaminants into the river. However, the potential risks due to biological uptake of wastes may be significant.

The last scenario evaluated in the Risk Assessment is the worst-case scenario of residential development adjacent to the waste areas. The pathways previously described for the current and most likely future use scenarios would be similar in the residential scenario. However, an additional exposure pathway of ingestion of contaminated ground water would result in a total excess cancer risk greater than 1×10^{-3} as well as a significant non-carcinogenic risk. This Record of Decision will address the ground water exposure pathway by eliminating the source of continued contamination.

The preceding paragraphs describe potential impacts to human health. In addition to impacts to human health, the lagoon sludge poses an environmental threat to wildlife, especially birds which may land on its surface and die from contact with the sludge.

II. ENFORCEMENT

The Sheridan Site Committee has identified over 150 potentially responsible parties (PRPs) for the site. To date, 102 Notice/104(e) information requests were sent to site PRPs. Remaining PRPs will be notified when Special Notice letters are issued. EPA will continue its enforcement activities and send Special Notice Letters to PRPs prior to the initiation of the remedial design. Should the PRPs decline to conduct future remedial activities, EPA will either take enforcement actions or provide funding for these activities while seeking cost recovery for all EPA-funded response actions from the PRPs.

III. COMMUNITY RELATIONS

In general, there has been a long history of citizen awareness of the Sheridan Disposal Services site. In the early 1970s when incineration at the site resulted in air emissions, people living within a 7-mile radius complained. In 1971 a citizens' group submitted a petition with over 500 signatures to the Texas Water Quality Board calling for its closure.

However, community concerns of either the area residents or local officials are now very low, probably because the site has been inactive since 1984. Also the site is relatively remote and there are no residences within a mile.

On November 15, 1988, EPA issued a press release and the Proposed Plan fact sheet was mailed on November 9. The press release was sent to all news organizations in the Houston/Hempstead/Brenham area. The fact sheet was mailed to 92 residents and local officials. Extra copies of the fact sheet were provided to the five area repositories.

In accordance with CERCLA, Section 117, the press release and proposed plan fact sheet announced the comment period of November 15 through December 15, 1988. A public meeting was held on November 22, 1988, at the Waller County Courthouse. Forty people attended the meeting and two made statements or asked questions. Additional written comments were received from four people or organizations.

IV. ALTERNATIVE EVALUATION

4.1 EVALUATION CRITERIA

In accordance with Section 121 (a), (b), and (d) of the Superfund Amendments and Reauthorization Act (SARA), EPA has determined that nine factors must be considered in selecting a remedy for a Superfund site. These items are summarized below:

1. Consistency with Other Environmental Laws

   In determining appropriate remedial actions at Superfund sites, consideration must be given to the requirements of other Federal and State environmental laws, in addition to CERCLA as amended by SARA. Primary consideration is given to attaining applicable or relevant and appropriate Federal and State public health and environmental laws and regulations and standards. Not all Federal and State environmental laws and regulations are applicable to each Superfund response action. The compliance of each remedial alternative with all applicable or relevant and appropriate environmental laws is discussed in Appendix C.

2. Reduction of Toxicity, Mobility or Volume

   The degree to which alternatives employ treatment that reduces toxicity, mobility or volume must be assessed. Relevant factors include:

   - the treatment processes the proposed solutions employed and materials they treat;
   - the amount of contaminated materials that will be destroyed or treated;
   - the degree of expected reduction in toxicity, mobility, or volume;
   - the residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity for bioaccumulation of such hazardous substances and their constituents.

3. Short-term Effectiveness

The short-term effectiveness of an alternative must be assessed considering the following:

o Magnitude of reduction of existing risks; and

o short-term risks that might be posed to the community, workers, or the environment during the implementation of an alternative including potential threats to human health or the environment associated with excavation, transportation, and redisposal or containment.

4. Long-term Effectiveness and Permanence

Alternatives are assessed for the long-term effectiveness and permanence they afford along with the degree of certainty that the remedy will prove successful. Factors considered are:

o Magnitude of residual risks in terms of amounts and concentrations of wastes remaining following implementation of a remedial action, considering the persistence, toxicity, mobility, and propensity for bioaccumulation of such hazardous substances and their constituents;

o type and degree of long-term management required, including monitoring and operation and maintenance;

o potential for exposure of human and environmental receptors to remaining waste considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;

o long-term reliability of the engineering and institutional controls, including uncertainties associated with the land disposal of untreated wastes and residuals; and

o potential need for replacement of the remedy.

5. Implementability

The ease or difficulty of implementing the alternatives are assessed by considering the following factors;

o Degree of difficulty associated with constructing the solution;

o expected operational reliability of the treatment technology;

o need to coordinate with and obtain necessary approvals and permits (or meet the intent of any permit in the case of Superfund actions);

o availability of necessary equipment and specialists; and

o available capacity and location of needed treatment, storage, and disposal services.

6. Costs

The types of costs that should be assessed include the following:

o Capital costs;

o operation and maintenance costs;

o net present value of capital and operation and maintenance cost; and

o potential future remedial action costs.

7. Community Acceptance

This assessment should evaluate:

o Components of remedial alternatives that the community supports;

o features of the alternatives about which the community has reservations; and

o elements of the alternatives which the community strongly opposes.

8. State Acceptance (through the Texas Water Commission)

Evaluation includes assessment of:

o Components of remedial alternatives that the State supports;

o features of the alternatives about which the State has reservations; and

o elements of the alternatives which the State strongly opposes.

9. Overall Protection of Human Health and the Environment

Following the analysis of the remedial options against individual evaluation criteria, the alternatives are assessed from the standpoint of whether they provide adequate protection of human health and the environment.

EPA is also directed by Superfund law (SARA) to give preference to solutions that utilize treatment to remove contaminants from the environment. Offsite transport and disposal without treatment is the least preferred option where practicable treatment technologies are available.

4.2 DESCRIPTION OF ALTERNATIVES

In conformance with the National Contingency Plan (NCP), initial remedial approaches were screened to determine which might be appropriate for this site (see the Sheridan Disposal Services Feasibility Study for details of this evaluation). From these possible remedies, five were chosen for more detailed evaluation and comparison with the remedy selection criteria outlined above. In addition, "No Action" was evaluated to comply with the requirements of the NCP. Each remedy is summarized below. Common elements of all the plans include the following activities:

- o Install a RCRA-compliant cap over the entire pond and dike area.
- o Install a flexible spur jetty river bank erosion control system in the Brazos River.
- o Monitor ground water quality for a minimum of 30 years.
- o Decontaminate, disassemble and properly dispose of all on-site tanks and processing equipment.
- o Properly dispose of any drums encountered during remediation. Contents of intact drums will be treated on-site or disposed of off-site, depending on the nature of the material.
- o Treat potentially contaminated stormwater and waste-water streams resulting from the waste treatment alternatives, to remove solids, metal, and organic constituents. The treated water will comply with all Federal/State standards for discharge into the Brazos River.
- o Implement institutional controls to preclude use of contaminated ground water and ensure the long-term integrity of the cap.

Alternative 1: No Action - This alternative requires the sealing of old wells and installation of new monitoring wells, as necessary, and ground water monitoring for a minimum of 30 years.

Alternative 2: Soil Mixing - This alternative involves mixing one part contaminated soil and sludge with six parts clay rich soil to reduce excess moisture and provide a structurally stable foundation for the cap. The soil and waste mixture would be placed into a RCRA-compliant landfill in the main pond. The estimated cost of this alternative is $20,656,000.

Alternative 3: Stabilization - This alternative involves uniformly mixing the contaminated soil and sludge with a solidifying agent such as cement or flyash to form a solid material. Chemical additives may be added to reduce the leachability of contaminants or to improve strength or any other desir-

able property. After the waste is stabilized, it would be placed into a RCRA-compliant landfill in the main pond. The estimated cost of this alternative is $18,856,000.

Alternative 4: Biotreatment - This alternative would utilize an on-site aqueous biological system to remove organic waste constituents from the contaminated soils and sludge. Biotreatment will be conducted in tanks or impoundments and a pilot-study will be conducted during remedial design to optimize biodegradation processes. This alternative will effectively remove all volatile and semi-volatile constituents from the waste. Emissions of volatile organic compounds during biotreatment will be destroyed using a fume incinerator, carbon absorption or equivalent system. During the design, all reasonable efforts will be made to optimize biodegradation of PCBs. If Biotreatment can reduce the level of PCBs in the residual to less than 50 ppm, the residuals will be stabilized, returned to the pond and capped. If the concentration of PCBs in the biotreatment residuals is greater than 50 ppm, they will be stabilized and returned to a RCRA-compliant landfill in the pond area. The estimated cost of the alternative is $28,346,000.

Alternative 5: Solvent Extraction - This alternative utilizes a chemical solvent(s) to separate the waste into oil, solids and water. Organic contaminants would be concentrated into the oil which would be incinerated onsite in a mobile incinerator or off-site. Metals would concentrate in the solid phase. These solids would be stabilized, if necessary, returned to the pond area, and capped. The water generated would be treated in the on-site waste water treatment system to remove inorganic and organic contaminants and discharged to the river. The estimated cost of this alternative is $36,508,000.

Alternative 6: Incineration - This alternative uses a rotary kiln to destroy essentially all of the organic contaminants in the waste. The ash will be transported to a RCRA-compliant off-site landfill for disposal. The estimated cost of this alternative is $39,610,000.

4.3 EVALUATION OF ALTERNATIVES

The following values were assigned to compare remedial selection criteria:

- "+" Alternative should exceed a criterion in comparison to other alternatives.
- "0" Alternative should meet the selection criterion.
- "-" Alternative will not meet a criterion, or will not meet a criterion as well as other alternatives.

A "+/0" or "-/0" designation indicates that the alternative is intermediate in

ranking between the + and the 0 or - and the 0 ratings. The rationale for the ratings assigned to each alternative is presented in the following subsections:

1. Compliance with ARARs
With the exception of the No Action alternative, all alternatives were rated "0" because they are designed to comply with ARARs described in Appendix A. The No Action remedy was rated "-" because it does not meet closure ARARs or the requirements of the PCB Spill Cleanup Policy and it does not address risk-based remedial objectives.

2. Reduction of Mobility, Toxicity and Volume

The No Action alternative is ranked "-" because it does nothing to reduce toxicity, mobility or volume. Soil Mixing is also ranked "-" since it minimally reduces waste mobility via largely reversible chemical reactions with the soil matrix but does not reduce waste toxicity and greatly increases waste volume. Stabilization is rated "0" because it more effectively reduces waste mobility than soil mixing, but does not significantly reduce toxicity, and increases waste volume. In Biotreatment, most of the organic contaminants will be destroyed and mobility and overall waste volume reduced. Therefore, Biotreatment is rated "+/0". Incineration and Solvent Extraction (in conjunction with incineration) are ranked "+" since both result in the greatest reduction of toxicity, mobility and volume.

3. Short-Term Effectiveness

With the exception of the No Action alternative, which is ranked "-", all alternatives effectively reduce the magnitude of existing short-term risks in two to five years. The time to complete remediation is two years for Soil Mixing and Stabilization, three years for Biotreatment, four years for Solvent Extraction and five years for Incineration.

Also, the alternatives differ with regard to risks to the community, workers, or the environment during implementation. All action alternatives involve the risks attendant to construction involving heavy earth work, including risks to workers and environmental impacts due to dust and noise. Further, all action alternatives will release volatile organics to some degree as the pond sludge is removed for treatment.

The risks associated with Soil Mixing and Stabilization occur over the shortest time. However, the volatile emissions resulting from these alternatives should be greater than Biotreatment, which will control fugitive emissions during treatment. Therefore, Soil Mixing and Stabilization are ranked "0" and Biotreatment is ranked "+". Solvent Extraction will require slightly longer to complete and involve additional handling and processing equipment and is also ranked "0". The Incineration

alternative is ranked "-" because of increased risks to on-site workers due to increased materials handling requirements and unit processes involving high temperature combustion, rotary machinery and periodic vessel entry, and its longer period of operation.

4. Long-Term Effectiveness and Permanence

Except for the No Action alternative, which is ranked "-", a major difference between the alternatives is the degree which they minimize the long-term risks from leaching of waste constituents and exposure to residual waste. The Soil Mixing alternative is ranked "-" because waste constituents are less effectively immobilized than in other alternatives and this alternative results in a larger residual volume relative to other alternatives. The Stabilization alternative is ranked "0/-" because the degree of mobility reduction for the Stabilization alternative is probably greater than for Soil Mixing, but the residuals will contain significantly more contaminants and be of greater volume than other alternatives. The Biotreatment alternative is ranked "+" because this process would destroy the mobile organic compounds contained within the waste, that is, the volatiles and semivolatiles. Certain compounds, such as PCBs, would be more difficult to degrade. Even if not degraded, however, the potential for mobility of these compounds would be reduced through elimination of the more mobile constituents in the waste matrix and stabilization. Incineration and Solvent Extraction are ranked "+" because they are the only alternatives which destroy essentially all of the organic contaminants in the waste and involve the least residual volume.

5. Implementability

The No Action alternative would be the easiest to implement and is rated "+". Among the remaining alternatives, the Soil Mixing and Stabilization alternatives are readily implementable. They are ranked "+" because they are mechanically simple and readily adaptable to field conditions, and they do not require special equipment or off-site facilities. The

Biotreatment alternative is ranked "0" because it will probably require the construction of specialized treatment tanks to accommodate the special mixing and sludge handling needs of that alternative. Still, Biotreatment is a demonstrated technology, is adaptable to unexpected waste characteristics and does not require operators with a high level of training. By contrast, the Solvent Extraction and Incineration alternatives are ranked "-" because these technologies are mechanically complex, require highly specialized equipment and operators, and may require an approved off-site

disposal facility for ash. In addition, Solvent Extraction may be difficult to adapt in the field.

6. Cost

Estimated costs for each alternative are summarized in Table 4. Included in this table are total capital costs, total post-closure operation and maintenance costs, total present worth and replacement costs. Replacement costs were included to evaluate the potential costs that would be incurred if the alternative were to fail. The likelihood of failure is largely determined by the degree the alternatives ensure the long-term permanence and effectiveness of the remedy. As described in Section 4.3, Soil Mixing and Stabilization receive the lowest rating for Long-term Effectiveness and Permanence and are therefore most likely to require replacement in the future. The replacement costs are estimated assuming on-site incineration is used as the replacement technology and vary according to the estimated residual volume which would require treatment.

7. Community Acceptance

The community has voiced limited support for the Biotreatment alternative and has not expressed any concerns about the alternative. Therefore biotreatment is rated "+" and all other alternatives are rated "0".

8. State Acceptance

The State of Texas, through the Texas Water Commission, has indicated that they have no objection to the selected alternative. Therefore, Biotreatment is rated "+" and all remaining alternatives are rated "0".

9. Overall Protection of Human Health, Environment

The No Action alternative is ranked "-" because the potential exposures by direct contact to waste, bank failure and inundation of the wastes and leaching to groundwater are not controlled. All remaining alternatives prevent these exposures but differ in the degree they ensure long-term effectiveness and permanence and achieve short-term effectiveness. Therefore, Soil Mixing is ranked "0/-" because it results in the greatest volume of waste residual without significant treatment. Stabilization is ranked "0" because it decreases the mobility of the waste without decreasing waste toxicity; however, it increases waste volume. Biotreatment is ranked "+" because this alternative degrades most organic waste constituents as well as reducing waste mobility and volume. Solvent Extraction is ranked "+" because all contaminants are destroyed to the maximum extent possible. Incineration also achieves similar destruction, but is rated "+/0" because it is less effective in the short-term.

TABLE 4

Cost Summary of Remedial Alternatives (in dollars)

	ALT 1 NO ACTION	ALT 2 SOIL MIXING	ALT 3 STABILIZATION	ALT 4 BIOTREATMENT	ALT 5 SOLVENT EXTRACTION	ALT 6 INCINERATION
Total Capitol Cost	90,000	19,662,000	17,993,000	27,483,000	35,645,000	38,747,000
Total Post Closure Operation and Maintenance Costs	460,000	994,000	863,000	863,000	863,000	863,000
Total Present Worth	370,000	20,216,000	18,466,000	27,956,000	36,118,000	39,220,000
[1]Replacement Cost	0	Greater than[2] 100,000,000	45,000,000	30,000,000	0	0

[1] Estimated using expected residual volume increase or reduction and the Sludge volume Sensitivity Cost Analysis in the Feasibility Study

[2] Value is approximate since the cost sensitivity analysis only evaluated up to a 50% volume increase and this alternative involves a 6-fold increase.

4.4 OPERATION AND MAINTENANCE

Site operation and maintenance will include a program for sampling on-site ground water monitoring wells. Additional site maintenance will include, but not be limited to inspection and repair (as necessary) of the erosion control system in the Brazos River, the cap or landfill and the perimeter fence, and maintenance of surface vegetation and appropriate drainage. The details of these activities will be defined in the Operation and Maintenance Plan of the remedial design.

V. SELECTED REMEDY

Based on the information provided in the administrative record and the results of the evaluation of alternatives (Section 4.3), the "final" remedy has been selected. It is EPA's judgement that the Biotreatment alternative best satisfies both the statutory and selection criteria in comparison to the other alternatives evaluated in this document.

Biotreatment will significantly reduce waste mobility, toxicity and volume and essentially eliminate the source of contaminants to ground water. Further, Biotreatment will result in the destruction of all mobile organics which could migrate into the environment if the containment system were to fail. It is the least costly alternative which will attain these goals; therefore, it is the most cost-effective alternative.

If Biotreatment can reduce the level of PCBs in the residuals to less than 50 ppm, the residuals will be stabilized, returned to the pond and capped. If the concentration of PCBs in the biotreated residuals is greater than 50 ppm, they will be stabilized and returned to to a RCRA-compliant landfill in the pond area. Waste requiring remediation by Biotreatment shall be defined as the following:

1. All material containing greater than 25 ppm of PCBs. This material includes the sludges contained in the pond and evaporation system;

2. Floating oil and emulsion in the pond and in on-site storage tanks;

3. Affected soil under pond - Affected soil under the pond is defined as soil that is intermixed with sludge or contains greater than 25 ppm of PCBs. The extent of affected soil under the pond will be determined during the remedial design/remedial action.

4. Dike surface soils - This material shall include: 1) oily soil on the inside dike slope between the current sludge level to the highest level the floating oil layer has contacted; 2) Grossly contaminated soil and sludge deposits visible on the dike. At a minimum, this shall include the soil and sludge in the vicinity of the treatment tanks and incinerator in the north-northeastern portions of the dike.

5. The wastes described in items 1-4 above address all wastes containing over 25 ppm of PCBs and/or high concentrations of other organics such as benzene and phenol.

In addition to treating the waste described above by Biotreatment the remedy shall also include the implementation of the common elements described in Section 4.2. of this Record of Decision and section of 5.2 of the Source Control FS.

Appendix A

Applicable or Relevant and Appropriate Requirements (ARARs)

Section 121(d) of CERCLA, as amended by SARA, describes the types of standards that a remedial action is required to meet. The fundamental standard for evaluating remedies under Section 121 remains "protection of human health and the environment". In addition, the standards, requirements, criteria, or limitations under any Federal environmental law, or any more stringent State standard, that are "legally applicable" or "relevant and appropriate" must be met. To obtain compliance with this requirement, remedial alternatives were analyzed to determine what regulatory requirements would be applicable or relevant and appropriate. Tabl[illegible] of environmental standards that were reviewed to determine which of them had a bearing on remedial action at the site.

ARARs must be determined on a site-specific basis. The main feature of the Sheridan site is the 15-acre pond or surface impoundment used for past disposal activities. In conducting the ARARs evaluation, it became clear that while there are various regulatory provisions that are either applicable or relevant and appropriate depending on the type of technology utilized, the one key ARAR that would be relevant and appropriate upon completion of the selected remedy was the surface impoundment closure requirements under RCRA. Those closure requirements are the foundation of the remedial alternates developed and evaluated in the FS.

Where closure will take place with some hazardous constituents remaining on-site, the surface impoundment must be closed as a landfill. Under these closure requirements, free liquids would have to be removed from the main pond. In addition, the remaining material would have to be stabilized or solidified to a bearing capacity sufficient to support a final cover. Finally, a cover would have to be placed over the impoundment designed and constructed to:

(A) Provide long-term minimization of the migration of liquids through the closed impoundment;

(B) function with minimum maintenance;

(C) Promote drainage and minimize erosion or abrasion of the final cover;

(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(E) Have a permeability less than or equal to the permeability of any bottom liner or natural subsoils present.

Further, following closure, the integrity and effectiveness of the final cover must be maintained, including making repairs as necessary.

An evaluation of the potential ARARs for affected materials and soils, for discharge to surface water, for ground water, and for air emissions results in the identification of the following relevant and appropriate criteria or standards:

1. RCRA requirements contained in 40 CFR, Part 264, listed in Table A-2.

2. RCRA requirements contained in 40 CFR Parts 262 and 263 to the extent that a remedial alternative involves off-site transportation of materials. Additionally, 49 CFR Parts 107 174-177 relating to Hazardous Materials Transportation would be relevant and appropriate.

3. RCRA requirements contained in 40 CFR Part 264, Subpart B, related to general facility standards, consisting of:

   a. 40 CFR Section 264.14 (site security).
   b. 40 CFR Section 264.17 (incompatible waste).

4. RCRA requirements contained in 40 CFR Part 264, Subpart G, consisting of:

   a. 40 CFR Section 164.114 (equipment decontamination).
   b. 40 CFR Section 264.117 (monitoring).

5. RCRA requirements contained in 40 CFR Part 264, Subpart M relating to land treatment.

   a. 40 CFR SEction 264.273.
   b. 40 CFR Section 264.278.

6. RCRA requirements contained in 40 CFR Part 264, Subpart N relating to landfills.

7. TSCA requirements contained in 40 CFR Part 761, Subpart D, consisting of:

   a. 40 CFR section 761.70 (incineration)

8. TSCA requirements contained in 40 CFR part 761, Subpart G.

9. Section 4.01 of the Texas Clean Air Act.

10 Sections 339.41-.49, 333.17-.19 of Chapter 31 of Texas Administrative Code Relating to State Water Quality Standards as applied to the Brazos River.

11. Federal Water Quality Criteria for Fresh Water Aquatic Life Protection, and Consumption of Organisms.

12. Clean Water Act requirements for application of best engineering judgment prior to discharge, 40 CFR Part 125.

    a. Process water and potentially contaminated storm water collected and routed, as necessary, to activated sludge waste water treatment system equipped with carbon polishing.

13. All developed remedial alternatives have taken into account Executive Order 11988 on Flood Plain Management and will be implemented in such a manner as to minimize any impact on the flood plain.

In addition to these ARARs, during site remediation the Worker Health and Safety Plan would require compliance with the relevant provisions of the Occupational Health and Safety Act.

Additional details on how these ARARs were identified are outlined below.

ARARs for Affected Material and Soils

RCRA Requirements

Even though they are not legally applicable, certain RCRA requirements, including the RCRA design and operating standards, may be considered relevant and appropriate based on the fact that they address problems or situations sufficiently similar to those encountered at the Sheridan site.

Land Ban Requirements

Waste banned pursuant to the Hazardous and Solid Waste Amendments of 1984 (HSWA) cannot be placed in or on the land unless first treated to levels achieved by best demonstrated available technology (BDAT) for each hazardous constituent in the waste.

In order for the Land Disposal restrictions (LDR) to be ARARs for the site, RCRA listed wastes have to have been disposed of in the lagoon, or the waste must currently be a characteristic (i.e., corrosive, ignitable) waste. The waste at the Sheridan site does not exhibit RCRA characteristics and RCRA listed wastes are believed to have been disposed of at the site. However, based on currently available information, these wastes were probably incinerated on-site rather than disposed of in the pond. Therefore, the LDR will not be considered an applicable standard for the remedial activities at Sheridan. Additionally, because the contaminated medium consists of soil and debris, the RCRA Land Disposal Restrictions will not be a relevant or appropriate requirement for the remedial activities at Sheridan since the LDR BDAT standards were based on products in a waste stream, not soil and debris. However, if available LDR guidance (currently undergoing revision) changes or if additional information becomes available, the applicability of the LDR may be reevaluated.

PCB Contaminated Waste

The presence of PCBs has been detected in samples collected at the site. Generally, the manufacture, treatment and disposal of PCBs is regulated under the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq. In April 1987, the EPA published a general PCB Spill Cleanup Policy, 40 CFR Sections 761.120-761.135 (1987). This policy is intended to deal with unintentional spills, leaks or other uncontrolled discharges of materials containing PCBs in concentrations of 50 ppm or greater. This policy established requirements for the cleanup of these spills where PCBs have been released into the environment. Different cleanup levels are established depending upon the spill location, the potential for exposure to residual PCBs remaining after the cleanup, the concentration of PCBs initially spilled, and the nature and size of population at risk of exposure.

By its terms, the EPA PCB spill policy only applies to spills which occur after the effective date of the policy, which was May 4, 1987 [40 CFR Section 761.120 (a)(1)]. Clearly, these requirements are not applicable to residual PCBs remaining at the Sheridan site. However, the nature and scope of these regulations is such that they are considered relevant to site conditions. Specifically, the level of 25 ppm in 40 CFR Section 761.125 (c)(3) is the most appropriate action level for the Sheridan site.

The TSCA cleanup policy is an ARAR that defines action levels for cleanup. Action levels, in this sense, are levels of concentration of PCBs in material at or above which the material must be remediated.

ARARs for Discharge to Surface Water

The Brazos River runs adjacent to the site and may be subject to point source discharges from the site during remediation. The point sources may consist of water generated by remedial activities as well as stormwater flows. This discharge may be treated as necessary by physical and chemical treatment, principally carbon adsorption, prior to discharge. At the completion of remediation, there will be no point source discharge.

However, at the completion of remediation, the Brazos may be impacted by a non-point source discharge, namely ground water seepage from the upper unconfined sand zone. The only standards that could be "legally applicable or relevant and appropriate" to this discharge would be State water quality standards or Federal water quality criteria.

State water quality standards are legally enforceable counterparts to the Federal water quality criteria. In Texas, the State water quality standards are set forth in Chapters 319 and 333 of the rules and regulations of the Texas Water Commission. Those standards establish certain numerical criteria which are legally applicable to waters in the Brazos. All remedial alternatives are designed to satisfy the requirements of 31 TAC Sections 319.21-29, 307.1 to 307.10 for the discharge of water from the upper unconfined sand zone to the Brazos.

With respect to concentrations of chemicals in the river:

(1) Final Maximum Concentration Limits (MCLs) are considered relevant and appropriate where MCLs are available; and

(2) State and Federal water quality criteria for the protection of human health are relevant and appropriate where MCLs are not available.

ARARs for Ground Water

The EPA's ground water protection strategy is based on the "differential protection" of ground water (i.e., ground water protection as it relates to a specific classification of an aquifer). Under the strategy, ground waters are classified as follows:

- Class I - ground waters that are highly vulnerable and either an irreplaceable source of drinking water or ecologically vital;
- Class II - ground waters currently used or potentially available for drinking water or other beneficial use; and
- Class III - ground waters not a potential source of drinking water and of limited beneficial use.

For Class I and Class II ground water Maximum Concentration Limits (MCLs) established under the Safe Drinking Water Act would be applicable for ground water sources which qualify as a public water system or a community water system. MCLs may also be relevant and appropriate to ground water that would not currently qualify as such systems but could potentially so qualify in the future. Similarly, where the State has established drinking water standards that are more stringent than the Federal MCLs, these may be applicable or relevant and appropriate.

There are two water-bearing zones underlying the site. The uppermost zone is unconfined. The next zone, which is separated from the upper zone by a clay aquitard, is referred to as the confined aquifer. Where the potential ground water pathway of concern is through a surface water discharge, risk-based numbers often form the basis for establishing protective levels for the saturated zone. This approach is also utilized where MCLs are not appropriate. Specific factors that may influence the appropriate risk level include:

(1) Feasibility of providing an alternative water supply;

(2) Current use of the ground water;

(3) Effectiveness and reliability of institutional controls;

(4) Ability to monitor and control the movement of contaminants in the ground water.

Also factored into decision making should be:

(1) Ability to limit extent of contamination;

(2) Impact of contamination on environmental receptors;

(3) Technical practicability and cost of remedial alternatives.

Clearly, MCLs are not legally applicable to the shallow unconfined ground water source at the Sheridan site. This is not a drinking water source being supplied to at least 25 individuals at least 60 days out of the year. Indeed, this source is not supplied to any individuals, any days of the year, and institutional controls will be implemented to prevent its use in the future.

The inapplicability of MCLs does not mean that this ground water source does not need to be protected to levels that will avoid an endangerment to human health and the environment. Since the only receptor for this ground water source is the Brazos River, it is expected that this standard can be achieved by ensuring that any potential impact from the site on the ground water will not result in levels of constituents that, once discharged to the river, would have an adverse impact on human or aquatic receptors. However, this must be confirmed through the demonstration that an alternate concentration limit is appropriate for this site. This demonstration is currently being prepared and it is believed that such a demonstration can be made.

Taking into account the mixing zone of initial dilution that would result from the seepage of the shallow sand into the Brazos River it is possible to back calculate permissible ground water concentrations from applicable water quality standards.

Source control remediation would then need to assure that these levels were never exceeded in the shallow unconfined ground water zone.

ARARs for Air Emissions

Based on a review of all potentially applicable air emission-related regulations and standards, the only "legally applicable or relevant and appropriate requirement" for air emissions at the completion of remediation is specified in Section 4.01 of the Texas Clean Air Act, which provides that "no person may cause, suffer, allow or permit the emission of air contaminants or the performance of any activity which causes or contributes to, or which will cause or contribute to, a condition of air pollution". "Air pollution" is defined "as the presence in the atmosphere of one or more air contaminants or a combination thereof, in such concentration and of such duration as may tend to be injurious to or to adversely affect human health or the environment, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property."

To assure compliance with this standard, each of the proposed remedial alternatives contains provisions for periodic ambient monitoring to verify that site conditions existing at the completion of remediation are not causing or contributing to a condition of air pollution. All of remedial actions are designed to insure the emissions are in compliance with this ARAR.

Table A-1

STANDARDS, REQUIREMENTS, CRITERIA, OR LIMITATIONS EVALUATED FOR ARARs DETERMINATION

- Safe Drinking Water Act
- Clean Water Act
- Solid Waste Disposal Act (RCRA)
- Toxic Substances Control Act (TSCA)
- Occupational Safety and Health Act
- Hazardous Materials Transportation Act
- National Historic Preservation Act
- Archaeological and Historical Preservation Act
- Historic Sites, Buildings and Antiquities Act
- Fish and Wildlife Coordination Act
- Endangered Species Act
- Rivers and Harbors Act of 1899
- Wilderness Act
- Scenic River Act
- Coastal Zone Management Act
- Texas Clean Air Act
- Texas Solid Waste Disposal Act
- Texas Water Code
- Texas Water Quality Standards
- Marine Protection, Research and Sanctions Act
- Executive Order Requirements for Flood Plains and Wetlands
- Federal Insecticide, Fungicide, and Rodenticide Act

Table A-2

APPLICABLE OR RELEVANT AND APPROPRIATE RCRA REQUIREMENTS

A. Cover (40 CFR Part 264, Sub-part N)

1. Eliminate Free Liquids.

2. Stabilize to a bearing capacity sufficient to support final cover.

3. Cover designed to:

   a. provide long term minimization of migration of liquids through closed area;
   b. function with mirimum maintenance;
   c. promote drainage and minimize erosion;
   d. accommodate settling and subsidence so that cover integrity is maintained; and
   e. have a permeability less than or equal to permeability of any bottom liner system or natural subsoil.

4. Post-Closure Designed to:

   a. maintain integrity and effectiveness of cover;
   b. maintain ground water monitoring system;
   c. prevent run-on and run-off from eroding or otherwise damaging final cover; and
   d. prevent disturbance of cover.

B. Incinerator (40 CFR Part 264, Support O and 40 CFR Section 761.70)

1. Incinerator equipped with high-temperature secondary combustion chamber and wet scrubber designed to meet particulate, HCL and destruction removal efficiency limitations.

APPENDIX B

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SMITHBAY DISPOSAL SERVICE

SITE NUMBER: TXD 062132147

INDEX DATE: 12/29/88

[illegible] ..VE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068132147

DOCUMENT NUMBER: 1
DOCUMENT DATE: 08/20/70
NUMBER OF PAGES: 005
AUTHOR: Jim Bain, Geologist, Subsurface Disposal Section
COMPANY/AGENCY: Texas Water Quality Board
RECIPIENT: Dick Whittington, Director, Field Operations, Texas Water Quality Board
DOCUMENT TYPE: Memorandum and Attachments
DOCUMENT TITLE: Re: Sheridan Disposal Service, Inc. and the operation of permitted disposal ponds in northwest Hempstead, TX

DOCUMENT NUMBER: 2
DOCUMENT DATE: 11/20/79
NUMBER OF PAGES: 005
AUTHOR: Ed McHam
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Site Logs
DOCUMENT TITLE: Potential Hazardous Waste Site Logs for Sheridan Disposal Service site

DOCUMENT NUMBER: 3
DOCUMENT DATE: 05/05/80
NUMBER OF PAGES: 013
AUTHOR: Tom Kearns, Environmental Quality Specialist
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Site Inspection Report
DOCUMENT TITLE: Potential Hazardous Waste site Site Inspection Report for Sheridan Disposal Service

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062133147

DOCUMENT NUMBER: 4
DOCUMENT DATE: 08/05/81
NUMBER OF PAGES: 002
AUTHOR: Thomas C. Bedford
COMPANY/AGENCY: Aqua Chem Laboratories, Inc.
RECIPIENT: Greendyke Transportation and U.S. EPA Region VI Site Files
DOCUMENT TYPE: Correspondence with Analytical Results
DOCUMENT TITLE: Sample Identification: Pit 6 - top sample received 07/24/81. Analysis No. 07385 for Sheridan Disposal Service Superfund site, in Hempstead, TX

DOCUMENT NUMBER: 5
DOCUMENT DATE: 08/06/82
NUMBER OF PAGES: 002
AUTHOR: Eileen W. Lee, Solid Waste Compliance Enforcement
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Strategy Determination
DOCUMENT TITLE: Potential Hazardous Waste Site Final Strategy Determination for Sheridan Disposal Service site

DOCUMENT NUMBER: 6
DOCUMENT DATE: 06/29/82
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Strategy Determination
DOCUMENT TITLE: Potential Hazardous Waste Site Final Strategy Determination for Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 7
DOCUMENT DATE: 09/20/82
NUMBER OF PAGES: 010
AUTHOR: Unspecified
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: [illegible] Region VI Site Files
DOCUMENT TYPE: Events Report
DOCUMENT TITLE: Chronology of Significant events regarding Sheridan Disposal Service that have occurred up to this date

DOCUMENT NUMBER: 8
DOCUMENT DATE: 07/12/83
NUMBER OF PAGES: 050
AUTHOR: Alphonse J. Newton, Jim Trusley and A. Chriss, Sample Personnel
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Linda Krokenberger, West Coast Technical Service
DOCUMENT TYPE: Traffic Reports
DOCUMENT TITLE: Various Organic Traffic Report packets: (1) No. F2236 - F2251 (2) No. F2270 - F2273 (3) F2273 - F2274 (4) No. MF0061 - MF9700, Chain of Custody forms No. 6-1232 - 6-1240; and attached airbills

DOCUMENT NUMBER: 9
DOCUMENT DATE: 10/21/83
NUMBER OF PAGES: 002
AUTHOR: Merton Coloton, District Supervisor
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: Chief of Appropriate Section, Enforcement And Field Operations Division
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Enforcement report concerning Sheridan Disposal Service, Permit No. 39007

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 063132147

DOCUMENT NUMBER: 10
DOCUMENT DATE: 12/07/83
NUMBER OF PAGES: 088
AUTHOR: Gordon Duncan, FIT Hydrologist
COMPANY/AGENCY: Ecology & Environment, Inc.
RECIPIENT: Dave Peters, Chief, Hazardous Waste Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attached Reports
DOCUMENT TITLE: Drilling and Sampling Inspection report for Sheridan Disposal Service site conducted from July 18 through July 20, 1983

DOCUMENT NUMBER: 11
DOCUMENT DATE: 01/19/84
NUMBER OF PAGES: 016
AUTHOR: Dave Peters, Chief, Hazardous Waste Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Sam Nott, Chief, Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attached Analytical Data
DOCUMENT TITLE: Results of air, groundwater, soil, river water and river sediment analyses

DOCUMENT NUMBER: 12
DOCUMENT DATE: 04/04/84
NUMBER OF PAGES: 002
AUTHOR: Russell Bartley, Chief, Operations Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attachments
DOCUMENT TITLE: The FIT report for drilling conducted for the Texas Department of Water Resources at the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 13
DOCUMENT DATE: 04/10/84
NUMBER OF PAGES: 007
AUTHOR: Larry B. Felosaco, Chairman
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Charles E. Nemir, Executive Director, Texas Department of Water Resources
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Ranking of the Sheridan Disposal Service site; and, interest by the PRP's to initiate a investigative study of the site including the development of a satisfactory closure plan

DOCUMENT NUMBER: 14
DOCUMENT DATE: 04/20/84
NUMBER OF PAGES: 002
AUTHOR: Anthony L. Graroner, Remedial Project Manager
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Mike Dick, Texas Department of Water Resources
DOCUMENT TYPE: Tentative Disposition
DOCUMENT TITLE: Potential Hazardous Waste Site Tentative Disposition for Sheridan Disposal site

DOCUMENT NUMBER: 15
DOCUMENT DATE: 10/01/84
NUMBER OF PAGES: 025
AUTHOR: Staff Engineers
COMPANY/AGENCY: Resource Engineering, Inc.
RECIPIENT: Sheridan Site Steering Committee / U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: Aquatic survey of Clarke Lake near the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062138147

DOCUMENT NUMBER: 16
DOCUMENT DATE: 11/05/84
NUMBER OF PAGES: 010
AUTHOR: Robert W. Lee, Solid Waste Compliance Enforcement
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Memorandum and Attachments
DOCUMENT TITLE: Sheridan Disposal Services, Inc. lagoon sludge assessment; Solid waste registration No. 38067

DOCUMENT NUMBER: 1
DOCUMENT DATE: 11/08/84
NUMBER OF PAGES: 001
AUTHOR: Ann McGinley
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communications
DOCUMENT TITLE: Re: Conversation with Greg McCabe concerning PCB contamination at the Sheridan Disposal Service site

DOCUMENT NUMBER: 18
DOCUMENT DATE: 03/11/85
NUMBER OF PAGES: 032
AUTHOR: Bryan W. Dixon, P.E., Chief, Solid Waste And Spill Response Section
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: Larry B. Feldcamp, Chairman, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Closure of the Sheridan Disposal Service site; Obtaining of the TSCA permit prior to the actual start of on-site construction activities

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 19
DOCUMENT DATE: 06/27/85
NUMBER OF PAGES: 003
AUTHOR: Martha McKee, Chief, Superfund Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry Feldcamp, Chairman, Sheridan Disposal Committee (Sheridan Site Steering Committee)
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Technical issues that will require a response before further negotiations regarding closure of the Sheridan Disposal Service site

DOCUMENT NUMBER: 20
DOCUMENT DATE: [illegible]
NUMBER OF PAGES: 002
AUTHOR: Greg McCabe, Removal Project Manager, Superfund Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dennis Zapata, Senior Project Manager, Resource Engineering
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Preliminary assessment of the additional information and sampling needs for the Sheridan Disposal Service site

DOCUMENT NUMBER: 21
DOCUMENT DATE: 07/30/85
NUMBER OF PAGES: 004
AUTHOR: Keith Bradley, FIT Regional Project Officer
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Martha M. McKee, Chief, Superfund Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Sampling Inspection Report
DOCUMENT TITLE: FIT report regarding HNu results and Odor detected at the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 22
DOCUMENT DATE: 08/01/85
NUMBER OF PAGES: 057
AUTHOR: Dennis L. Caputo, C.E.P., Senior Project Manager
COMPANY/AGENCY: Resource Engineering, Inc.
RECIPIENT: Greg McCabe, Superfund Enforcement Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Re: Copies of the Quality Assurance Project Plan for additional sampling and testing work to be done at the Sheridan Disposal Service site

DOCUMENT NUMBER: 23
DOCUMENT DATE: 08/02/85
NUMBER OF PAGES: 001
AUTHOR: Jose' G. Rodriquez
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Site Inspection Report
DOCUMENT TITLE: Review of the site inspection report for Sheridan Disposal Service site, near the Brazos River

DOCUMENT NUMBER: 24
DOCUMENT DATE: 08/07/85
NUMBER OF PAGES: 002
AUTHOR: Gregory D. McCabe, Superfund Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dennis Caputo, Senior Project Manager, Resource Engineering
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Comments on the reevaluation of preliminary assessment on additional information and sampling for the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 082132147

DOCUMENT NUMBER: 25
DOCUMENT DATE: 08/20/85
NUMBER OF PAGES: 002
AUTHOR: Robert G. Forrest, Chief, Office of Quality Assurance
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Martha McKee, Chief, Superfund Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Conditional approval of the Quality Assurance Project Plan for Sheridan Disposal Service site

DOCUMENT NUMBER: 26
DOCUMENT DATE: 08/30/85
NUMBER OF PAGES: 021
AUTHOR: Staff Engineers
COMPANY/AGENCY: Resource Engineering, Inc. for the Sheridan Site Steering Committee
RECIPIENT: U.S. EPA Region VI Site Files / Texas Department of Water Resources
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: The Hydrogeologic Investigation Plan for the Sheridan Disposal Service Field Activities

DOCUMENT NUMBER: 27
DOCUMENT DATE: 09/13/85
NUMBER OF PAGES: 038
AUTHOR: Dennis L. Caputo, C.E.P., Senior Project Manager
COMPANY/AGENCY: Resource Engineering, Inc.
RECIPIENT: Greg McCabe, Superfund Enforcement Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: The Sampling and Analysis Plan for Investigations of Clarke Lake, and the evaporation system area at the Sheridan Disposal Service site located near Hempstead, TX

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062133147

DOCUMENT NUMBER: 28
DOCUMENT DATE: 09/20/85
NUMBER OF PAGES: 001
AUTHOR: Greg McCabe, Superfund Enforcement Branch, Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communication
DOCUMENT TITLE: Re: Conversation with John Bins of REI, concerning barrels on-site containing unknown substances

DOCUMENT NUMBER: 29
DOCUMENT DATE: 10/03/85
NUMBER OF PAGES: 001
AUTHOR: Greg McCabe, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communications
DOCUMENT TITLE: Conversation with David Eisner, aide to Congressman Sweeney regarding the upcoming visit by Messr. Feldcamp and Caputo, to Congressman Sweeney's office

DOCUMENT NUMBER: 30
DOCUMENT DATE: 10/11/85
NUMBER OF PAGES: 003
AUTHOR: Greg McCabe, Superfund Enforcement Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dennis Caputo, C.E.P., Senior Project Manager, Resource Engineering
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: EPA's review of the Hydrogeologic Investigation Plan for the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 31
DOCUMENT DATE: 10/24/85
NUMBER OF PAGES: 007
AUTHOR: Dennis L. Caputo, C.E.P., Senior Project Manager
COMPANY/AGENCY: Resource Engineering, Inc.
RECIPIENT: Greg McCabe, Superfund Enforcement Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Response to Mr. McCabe's letter of October 11, 1985, regarding the Hydrogeologic Investigation Plan for Sheridan Disposal Service site

DOCUMENT NUMBER: 32
DOCUMENT DATE: 10/28/85
NUMBER OF PAGES: 010
AUTHOR: Thomas D. Brisbin, Deputy Program Manager
COMPANY/AGENCY: Planning Research Corporation
RECIPIENT: Greg McCabe, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Draft Report entitled "Sheridan Disposal Services Site, Sampling and Analysis Plan, Technical Review"

DOCUMENT NUMBER: 33
DOCUMENT DATE: 10/30/85
NUMBER OF PAGES: 003
AUTHOR: Greg McCabe, Superfund Enforcement Branch, Compliance Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dennis L. Caputo, Senior Project Manager, Resource Engineering, Inc.
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: EPA's comments and requests regarding their review of the Sampling and Analysis Plan for the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062138147

DOCUMENT NUMBER: 34
DOCUMENT DATE: 11/04/85
NUMBER OF PAGES: 004
AUTHOR: Dennis L. Caputo, C.E.P., Senior Project Manager
COMPANY/AGENCY: Resource Engineering, Inc.
RECIPIENT: Larry Rexroat, Remedial Project Manager, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence And Attachments
DOCUMENT TITLE: Re: Responses to the EPA's review of the Sampling & Analysis Plan for the Sheridan Disposal Service site

DOCUMENT NUMBER: 35
DOCUMENT DATE: 11/06/85
NUMBER OF PAGES: 002
AUTHOR: John Lee, Senior Project Engineer
COMPANY/AGENCY: Resource Engineering
RECIPIENT: Larry Rexroat, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Development of an Endangerment Assessment for Sherican, in support of the Remedial Investigation that was done

DOCUMENT NUMBER: 36
DOCUMENT DATE: 11/06/85
NUMBER OF PAGES: 002
AUTHOR: Harry C. Day, Jr., Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Larry Rexroat, Remedial Project Manager, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Re: A draft of the Site Safety Plan for Site Activities at the Sheridan Disposal Service site, in Hempstead, TX

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 37
DOCUMENT DATE: 11/08/85
NUMBER OF PAGES: 035
AUTHOR: Larry B. Feldcamp, Chairman
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: The Honorable Mac Sweeney, Congressman (TX)
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Written answers to questions received from Congressman Sweeney's office related to the Sheridan Disposal Site

DOCUMENT NUMBER: 38
DOCUMENT DATE: 11/29/85
NUMBER OF PAGES: 001
AUTHOR: Larry Weiner, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Duane Sheridan, Sheridan Disposal Service
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Mr. Sheridan's inquiry concerning future use or disposal of equipment formerly used to treat, store, or dispose of hazardous substances

DOCUMENT NUMBER: 39
DOCUMENT DATE: 12/13/85
NUMBER OF PAGES: 001
AUTHOR: Staff
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: List of Meeting Attendees
DOCUMENT TITLE: List of attendees at Sheridan Site Meeting held 12/13/85 in Washington, D.C.

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 40
DOCUMENT DATE: 12/16/85
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, P.E., Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Bob Hennesschlager, Chief, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Trip Report
DOCUMENT TITLE: Re: Meeting with Congressman Sweeney, his staff, and Potentially Responsible Party Task Force to discuss Remedial Investigation/Feasibility Study activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 41
DOCUMENT DATE: 12/30/85
NUMBER OF PAGES: 018
AUTHOR: Larry B. Felcoamp, Chairman
COMPANY/AGENCY: Sheridan Site Steering Committee, Baker & Botts
RECIPIENT: Dick Whittington, Regional Administrator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Suggested changes to the newsletter on the Sheridan Disposal Service site

DOCUMENT NUMBER: 42
DOCUMENT DATE: 01/02/86
NUMBER OF PAGES: 018
AUTHOR: Mark J. Larson, Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Larry Rexroat, Environmental Scientist, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: "Regional office" file copies of organics and inorganics traffic reports from sample splits collected at Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068133147

DOCUMENT NUMBER: 43
DOCUMENT DATE: 01/16/86
NUMBER OF PAGES: 001
AUTHOR: Betty Williamson, Community Relations Department
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dick Whittington / Fran Phillips, U.S. EPA Region VI
DOCUMENT TYPE: Record of Communications
DOCUMENT TITLE: Re: Call to Larry Felcamp to discuss EPA community relations scenario

DOCUMENT NUMBER: 44
DOCUMENT DATE: 02/28/86
NUMBER OF PAGES: 012
AUTHOR: Larry S. Felcamp, Chairman
COMPANY/AGENCY: Sheridan Site Steering Committee, Baker & Botts
RECIPIENT: Dick Whittington, Regional Administrator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Updated Background Report used by Congressmen Sweeney during his press conference held on February 17, 1986 concerning the Sheridan Disposal Service Site in Hempstead, TX

DOCUMENT NUMBER: 45
DOCUMENT DATE: 03/14/86
NUMBER OF PAGES: 034
AUTHOR: Richard J. Green, Environmental Coordinator
COMPANY/AGENCY: Exxon Chemical Americas
RECIPIENT: Anthony L. Gardner, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Exxon Chemicals completed questionnaire concerning the production of materials using 2,4,5-TCP; and information regarding their waste disposal practices

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 46
DOCUMENT DATE: 04/04/86
NUMBER OF PAGES: 033
AUTHOR: Staff Consultants
COMPANY/AGENCY: Planning Research Corporation
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Draft Report
DOCUMENT TITLE: Sheridan Disposal Services Site Well Installation and Sediment Sampling

DOCUMENT NUMBER: 47
DOCUMENT DATE: 04/28/86
NUMBER OF PAGES: 076
AUTHOR: Philip R. Campagna, Chemist, Environmental Response Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Martha M. McKee, Chief, Superfund Compliance Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attached Report
DOCUMENT TITLE: Re: Air sampling results for the Sheridan Disposal Service site

DOCUMENT NUMBER: 48
DOCUMENT DATE: 05/20/86
NUMBER OF PAGES: 001
AUTHOR: Larry Rexroat Remedial Project Manager and Larry Wright, P.E., Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communication
DOCUMENT TITLE: Re: Conversation with Larry Feldcamp, of the Sheridan Site Committee concerning possible issuance of an Administrative Order for the Source Control RI/FS, and the Groundwater RI/FS

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 49
DOCUMENT DATE: 06/06/86
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Bob Hannesschlager, Chief, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum/Trip Report
DOCUMENT TITLE: A reconnaissance trip to aid in the development of an Administrative Order for the Remedial Investigation and Feasibility Study for the Sheridan Disposal Service site

DOCUMENT NUMBER: 50
DOCUMENT DATE: 06/27/86
NUMBER OF PAGES: 001
AUTHOR: Gayle D. Flowers, Executive Vice President
COMPANY/AGENCY: Aztec Manufacturing Company
RECIPIENT: Ruth L. Israeli, Remedial Project Officer, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Aztec's referral of it's response to EPA's 104(e) Notice Letter, to the Sheridan Site Steering Committee

DOCUMENT NUMBER: 51
DOCUMENT DATE: 06/30/86
NUMBER OF PAGES: 002
AUTHOR: Robert W. Small, Assistant General Counsel
COMPANY/AGENCY: Betz
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Betz's referral of their response to EPA's 104(e) Notice Letter, to the Sheridan Site Steering Committee

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 52
DOCUMENT DATE: 06/30/86
NUMBER OF PAGES: 001
AUTHOR: Frederic T. Radloff, Vice President, Engineering
COMPANY/AGENCY: South Coast Terminal, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: South Coast Terminal referral of their response to EPA's 104(e) Notice Letter, to the Sheridan Site Steering Committee

DOCUMENT NUMBER: 53
DOCUMENT DATE: 06/30/86
NUMBER OF PAGES: 001
AUTHOR: J.E. Fillinger, Supervisor, Group Accident Prevention & Occupational Health Staff
COMPANY/AGENCY: Armco National Supply Company
RECIPIENT: Allyn M. Davis, Director, Hazardous Waste Management Division, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Armco's response to EPA's Notice Letter request for information regarding it's disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 54
DOCUMENT DATE: 07/01/86
NUMBER OF PAGES: 001
AUTHOR: Peter R. McCormack, Attorney
COMPANY/AGENCY: Cameron Iron Works, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Officer, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Cameron's Iron Works referral of their response to EPA's 104(e) Notice Letter, without admission of liability, to the Sheridan Site Steering Committee

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 55
DOCUMENT DATE: 07/02/86
NUMBER OF PAGES: 001
AUTHOR: Geraldine Garber, Office Manager
COMPANY/AGENCY: Eltex Chemical & Supply Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Referral of the Eltex response to the Sheridan Site Steering Committee for answers to EPA's question regarding disposal activities at the site

DOCUMENT NUMBER: 56
DOCUMENT DATE: 07/08/86
NUMBER OF PAGES: 002
AUTHOR: Nelson A. Hincerer, Vice President Manufacturing
COMPANY/AGENCY: Oteco Equipment Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Officer, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Oteco's response to EPA's request for information that is now being handled by the Sheridan Site Steering Committee

DOCUMENT NUMBER: 57
DOCUMENT DATE: 07/09/86
NUMBER OF PAGES: 002
AUTHOR: H.W. Pfenning, Vice President, Manufacturing
COMPANY/AGENCY: Merichem Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Merichem's response to EPA's request for information regarding hazardous waste disposal at the Sheridan Disposal Service

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 58
DOCUMENT DATE: 07/10/86
NUMBER OF PAGES: 009
AUTHOR: Allyn M. Davis, Director Hazardous Waste Management
COMPANY/AGENCY: [illegible] Region VI
RECIPIENT: Attached List of Addressee's
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: 104(e) Notice Letter that was sent to listed addressee's, informing them of possible liability as a waste generator at the Sheridan Disposal Service site

DOCUMENT NUMBER: 59
DOCUMENT DATE: 07/10/86
NUMBER OF PAGES: 002
AUTHOR: Thomas A. [illegible], Attorney, Office of General Counsel
COMPANY/AGENCY: NL Industries, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Officer, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: NL Industries response to EPA's request for information concerning any hazardous waste dispose of at the Sheridan Disposal Service site

DOCUMENT NUMBER: 60
DOCUMENT DATE: 07/14/86
NUMBER OF PAGES: 001
AUTHOR: D.R. Whitaker, President
COMPANY/AGENCY: Nutro Products Corporation
RECIPIENT: Ruth L. Izraeli, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Nutro Products Corporation response to EPA's request for information regarding possible disposal activities at the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 61
DOCUMENT DATE: 07/14/86
NUMBER OF PAGES: 001
AUTHOR: Nancy A. Roberts, General Attorney, Law Department
COMPANY/AGENCY: Union Pacific Railroad Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Union Pacific response, on behalf of Missouri Pacific Railroad, to EPA's 104(e) Notice Letter, regarding possible hazardous waste disposal by Missouri Pacific Railroad at the SDS site

DOCUMENT NUMBER: 62
DOCUMENT DATE: 07/14/86
NUMBER OF PAGES: 001
AUTHOR: Don C. McDonald, Vice President - Legal
COMPANY/AGENCY: Anderson - Clayton
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Anderson-Clayton referral of their response to EPA's request for information concerning possible waste disposal activity, to the Sheridan Site Steering Committee

DOCUMENT NUMBER: 63
DOCUMENT DATE: 07/15/86
NUMBER OF PAGES: 001
AUTHOR: Peter R. Buenz, Executive Vice President
COMPANY/AGENCY: Chemical Exchange Industries, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: CXI's response to EPA's request for information regarding possible hazardous waste generated at the Sheridan Disposal

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 64
DOCUMENT DATE: 07/16/86
NUMBER OF PAGES: 002
AUTHOR: David J. Stone, Attorney and Assistant Secretary
COMPANY/AGENCY: Hughes Tool Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Hughes-Dresser/Hughes Tool Division response to EPA's request for information regarding possible waste generated at the Sheridan site, w/ the firms stated above.

DOCUMENT NUMBER: 65
DOCUMENT DATE: 07/16/86
NUMBER OF PAGES: 001
AUTHOR: C.A. Baldwin, Senior Attorney, Legal Division
COMPANY/AGENCY: Atlantic-Richfield Company
RECIPIENT: Allyn M. Davis, Director, Hazardous Waste Management Division, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Atlantic-Richfield's authorization for the Sheridan Site Committee to provide EPA with any information needed regarding hazardous waste generated at the site, by their company

DOCUMENT NUMBER: 66
DOCUMENT DATE: 07/18/86
NUMBER OF PAGES: 002
AUTHOR: Bruce Lee Jernigan, Manager, CERCLA Activities
COMPANY/AGENCY: Browning - Ferris Industries
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Browning - Ferris Industries response to EPA's request for information regarding

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 67
DOCUMENT DATE: 07/18/86
NUMBER OF PAGES: 001
AUTHOR: Ralph W. Johnson, Vice President, Environmental Affairs
COMPANY/AGENCY: Dixie Chemical Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Dixie Chemical Company's response to EPA's request for information regarding any disposal activity at the Sheridan Disposal Service site

DOCUMENT NUMBER: 68
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 001
AUTHOR: Pamela Phillips, Assistant Regional Counsel
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry E. Feldcamp, Chairman, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: A meeting Ms. Phillips would like to have concerning the 106 Administrative Order, and a meeting with REI to discuss the work that needs to be performed pursuant to the 106 Order

DOCUMENT NUMBER: 69
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 001
AUTHOR: John E. Smith, II, Senior Attorney
COMPANY/AGENCY: Enterprise Transportation Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Enterprise Transportation response to EPA's 104(e) Notice Letter requesting information regarding ET's disposal activities at the SDS site. Their response will be handled

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 70
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 002
AUTHOR: Robert J. Abraham, Attorney
COMPANY/AGENCY: USX Corporation
RECIPIENT: Ruth L. Israeli, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: USX Corporation participation in the Response Activities that are in process, at the Sheridan Disposal Service site, near Hempstead, TX

DOCUMENT NUMBER: 71
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 001
AUTHOR: Warren Williams
COMPANY/AGENCY: Oil Field Rental Service Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Oil Field Rental Service Co., response to EPA's request for information regarding disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 72
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 001
AUTHOR: Melinda S. Williams, Legal Assistant
COMPANY/AGENCY: Champion International Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: The information requested through the 104(e) Notice Letter by EPA regarding Champion International Corp. disposal activities at the Sheridan site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
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DOCUMENT NUMBER: 73
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 001
AUTHOR: M.M. Skeggs, Jr., Technical Manager, Environmental Affairs
COMPANY/AGENCY: Diamond Shamrock
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Diamond Shamrock's response to EPA's request for information regarding disposal activity at the Sheridan Disposal Service site near Hempstead, TX

DOCUMENT NUMBER: 74
DOCUMENT DATE: 07/21/86
NUMBER OF PAGES: 006
AUTHOR: Larry B. Feldkamp, Chairman, Sheridan Site Committee
COMPANY/AGENCY: Baker & Botts
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Involvement of the PRP's listed in Attachment A, in RI/FS process; and the committee's hopes that EPA will invite private parties to undertake the design and implementation of the remedy

DOCUMENT NUMBER: 75
DOCUMENT DATE: 07/22/86
NUMBER OF PAGES: 001
AUTHOR: Alex S. Karlin
COMPANY/AGENCY: Shell Oil Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Ms. Israeli's agreement to provide Shell Oil Company with an additional two weeks to

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 76
DOCUMENT DATE: 07/22/86
NUMBER OF PAGES: 001
AUTHOR: Stephen A. Hatridge, Attorney
COMPANY/AGENCY: Transcontinental Gas Pipe Line Corporation (Transco)
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transco's willingness to participate in the RI/FS process; and that they're presently participating with the Site Committee for Sheridan

DOCUMENT NUMBER: 77
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 001
AUTHOR: Thomas F. Harrison, Senior Corporate Counsel
COMPANY/AGENCY: B.F. Goodrich Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: B.F. Goodrich's involvement as a hazardous waste contributor at the Sheridan Disposal Service site

DOCUMENT NUMBER: 78
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 001
AUTHOR: W.F. McGuire, Manager, Environmental Protection Department
COMPANY/AGENCY: The Light Company / Houston Lighting & Power
RECIPIENT: Ruth L. Israeli, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: The Light Company's possible disposal activities at the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
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DOCUMENT NUMBER: 79
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 002
AUTHOR: Phillip J. Bateman, Corporate Director, Environmental Assurance
COMPANY/AGENCY: The Lubrizol Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Lubrizol's response to EPA's request for information regarding possible disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 80
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 089
AUTHOR: R.M. Heldridge, Manager Chemical Environmental Protection
COMPANY/AGENCY: The Goodyear Tire & Rubber Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: The Goodyear Tire & Rubber Company submittal of information requested by the EPA regarding GT&R's disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 81
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 041
AUTHOR: Carol Holland, Attorney
COMPANY/AGENCY: Chevron U.S.A., Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Chevron's response to EPA's request for information regarding disposal activities

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SITE NAME: SHERIDAN DISPOSAL SERVICE
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DOCUMENT NUMBER: 82
DOCUMENT DATE: 07/23/86
NUMBER OF PAGES: 001
AUTHOR: R.M. Heldridge, Manager, Chemical Environmental Protection
COMPANY/AGENCY: The Goodyear Tire & Rubber Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Disposal Site: Request for Participation in RI/FS Activities - US EPA correspondence of 06/20/86

DOCUMENT NUMBER: 83
DOCUMENT DATE: 07/24/86
NUMBER OF PAGES: 009
AUTHOR: Malcolm L. Payne, Environmental Coordinator
COMPANY/AGENCY: E.I. DuPont DeNemours & Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: DuPont's response to EPA's request for information regarding possible activity at the Sheridan Disposal Service site

DOCUMENT NUMBER: 84
DOCUMENT DATE: 07/24/86
NUMBER OF PAGES: 001
AUTHOR: Spencer J. Nunley, Assistant General Counsel
COMPANY/AGENCY: Mobay Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Mobay Corporation's response to EPA's request for information regarding disposal activities at the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 85
DOCUMENT DATE: 07/24/86
NUMBER OF PAGES: 001
AUTHOR: Neal S. Platzer, President
COMPANY/AGENCY: Platzer Shipyard, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Mr. Platzer's response to EPA's request for information regarding their disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 86
DOCUMENT DATE: 07/25/86
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry B. Feldkamp, Chairman, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan site committee's letter of 07/21/86, submitted in response to EPA's 104(e) response letter

DOCUMENT NUMBER: 87
DOCUMENT DATE: 07/25/86
NUMBER OF PAGES: 001
AUTHOR: Gary M. Rowen, Associate General Counsel
COMPANY/AGENCY: Celanese
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Celanese initial response to EPA's letter of June 23, 1986, requesting information concerning their disposal activities at the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 88
DOCUMENT DATE: 07/25/86
NUMBER OF PAGES: 001
AUTHOR: George R. Harvell, III, Manager of Environmental Investigations
COMPANY/AGENCY: Velsicol Chemical Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Velsicol's response to EPA's request for information regarding possible disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 89
DOCUMENT DATE: 07/25/86
NUMBER OF PAGES: 002
AUTHOR: Robert F. Wells, Vice President and Treasurer
COMPANY/AGENCY: T.H. Agriculture & Nutrition Company, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: T.H. Agriculture & Nutrition Company's involvement as a Potentially Responsible Party for the Sheridan Disposal Service site

DOCUMENT NUMBER: 90
DOCUMENT DATE: 07/29/86
NUMBER OF PAGES: 002
AUTHOR: W.F. Buchholtz, Environmental Coordinator
COMPANY/AGENCY: Exxon Chemical Americas
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Exxon response to EPA 's request for information regarding SDS site; and their

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 91
DOCUMENT DATE: 07/30/86
NUMBER OF PAGES: 001
AUTHOR: David M. Hayes, Senior Environmental Engineer
COMPANY/AGENCY: Crown Central Petroleum Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Crown Central Petroleum's participation in the Sheridan Site Steering Committee

DOCUMENT NUMBER: 92
DOCUMENT DATE: 07/31/86
NUMBER OF PAGES: 001
AUTHOR: Thurman S. Gasaway, President
COMPANY/AGENCY: Gulf Valve Company
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Gulf Valve Company's response to EPA's request for information regarding disposal activity, by their company, at the Sheridan Disposal Service site

DOCUMENT NUMBER: 93
DOCUMENT DATE: 07/31/86
NUMBER OF PAGES: 002
AUTHOR: A.B. Knight, Vice President, Safety
COMPANY/AGENCY: Groendyke Transport, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Groendyke Transport's response to EPA's request for information pertaining to possible disposal activities at the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 94
DOCUMENT DATE: 08/07/86
NUMBER OF PAGES: 001
AUTHOR: D.K. Holmes
COMPANY/AGENCY: [illegible]
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Site Steering Committee's handling of Wyatt's Industries response to EPA's questions regarding their involvement at this site

DOCUMENT NUMBER: 95
DOCUMENT DATE: 08/05/86
NUMBER OF PAGES: 005
AUTHOR: Robert Ingleson
COMPANY/AGENCY: Positive Feed, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Officer Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondnece and Attachments
DOCUMENT TITLE: Re: Mr. Ingleson's response to EPA's request for information regarding Positive Feed's involvement at the Sheridan Disposal Service site

DOCUMENT NUMBER: 96
DOCUMENT DATE: 08/07/86
NUMBER OF PAGES: 003
AUTHOR: Gary M. Rowen, Associate General Counsel
COMPANY/AGENCY: Celanese
RECIPIENT: Ruth L. Israeli, Remedial Project Officer, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Further response from Celanese, to EPA's letter of June 23, 1986, regarding information concerning the Sheridan Disposal Service site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 97
DOCUMENT DATE: 08/11/86
NUMBER OF PAGES: 004
AUTHOR: Stephen P. Krchma, Environmental Attorney
COMPANY/AGENCY: Monsanto Company
RECIPIENT: [illegible], Director, Hazardous Waste Management Division, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Monsanto's response to EPA's 104(e) letter dated 07/10/86 regarding possible liability as a Potentially Responsible Party for the Sheridan Disposal Service site, in Waller County, TX

DOCUMENT NUMBER: 98
DOCUMENT DATE: 08/11/86
NUMBER OF PAGES: 003
AUTHOR: Harold N. Meir, Vice-President
COMPANY/AGENCY: Pacific Molasses Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Pacific Molasses Company response to EPA's request for information regarding the company's disposal activities at the Sheridan Disposal Service site, in Hempstead, TX

DOCUMENT NUMBER: 99
DOCUMENT DATE: 08/13/86
NUMBER OF PAGES: 001
AUTHOR: C.H. Rivers
COMPANY/AGENCY: Shell Oil Company / Shell Chemical Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Shell Oil Company's involvement as a Potentially Responsible Party at the Sheridan Disposal Service site; and regarding their participation in the

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 100
DOCUMENT DATE: 08/18/86
NUMBER OF PAGES: 007
AUTHOR: H.N. Cunningham, III, Attorney
COMPANY/AGENCY: Pulley, Cole, Roberts & Cunningham, Attorneys and Counselors at Law
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: C & H Transportation response to EPA's request for information regarding their possible use of Sheridan Disposal Service as a waste disposal site

DOCUMENT NUMBER: 101
DOCUMENT DATE: 08/20/86
NUMBER OF PAGES: 001
AUTHOR: Arthur J. J. Leuterman, Ph.D., Manager, Environmental Engineering
COMPANY/AGENCY: Dresser Industries, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: DI's response to EPA's request for information regarding disposal activities at the SDS site; and, also about their becoming a member of the site committee

DOCUMENT NUMBER: 102
DOCUMENT DATE: 08/26/86
NUMBER OF PAGES: 039
AUTHOR: James E. Coleman, Vice President, Printing Ink Division
COMPANY/AGENCY: J.M. Huber Corporation
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: J.M. Huber's response to EPA's request for information regarding possible disposal

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 103
DOCUMENT DATE: 09/04/86
NUMBER OF PAGES: 004
AUTHOR: Harold N. Meier, Vice President
COMPANY/AGENCY: Pacific Molasses Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Pacific Molasses Company response to EPA's request regarding information concerning any possible disposal activity at the Sheridan Disposal Service site

DOCUMENT NUMBER: 104
DOCUMENT DATE: 09/08/86
NUMBER OF PAGES: 008
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Meeting Agenda
DOCUMENT TITLE: Sheridan Disposal Service site meeting agenda for the 09/08/86 conference held on the Hydrogeology Remedial Investigation Report

DOCUMENT NUMBER: 105
DOCUMENT DATE: 09/08/86
NUMBER OF PAGES: 001
AUTHOR: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communications
DOCUMENT TITLE: EPA's meeting with Sheridan Site Steering Committee, to discuss the five main problems with Chapter 4 (Hydrogeology Chapter) of the Remedial Investigation report

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 106
DOCUMENT DATE: 09/12/86
NUMBER OF PAGES: 002
AUTHOR: William B. Allison
COMPANY/AGENCY: Sewell & Riggs
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Pepper Renderings response to EPA's request for information concerning possible activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 107
DOCUMENT DATE: 09/18/86
NUMBER OF PAGES: 030
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry B. Feldcamp, Chairman, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Detailed comments on Chapter 4 of the Sheridan Disposal Service Remedial Investigation (RI) Report dated 07/01/86

DOCUMENT NUMBER: 108
DOCUMENT DATE: 10/27/86
NUMBER OF PAGES: 041
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry Feldcamp, Chairman, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Technical review of the Remedial Investigation (RI) submitted by the Sheridan Site Committee, for the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 109
DOCUMENT DATE: 11/12/86
NUMBER OF PAGES: 415
AUTHOR: Tim E. Sleeth, Attorney
COMPANY/AGENCY: Law Office of Smith & Fulsey
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Charter International Oil Company's response to EPA's 104(e) Notice Letter, in regards to disposal activities at the Sheridan Disposal Service site

DOCUMENT NUMBER: 110
DOCUMENT DATE: 12/10/86
NUMBER OF PAGES: 013
AUTHOR: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Listed Respondents
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Notification to various respondents that they have been identified as a potential member of the Sheridan Disposal Service Site Steering Committee

DOCUMENT NUMBER: 111
DOCUMENT DATE: 01/13/87
NUMBER OF PAGES: 007
AUTHOR: Richard H. Fuller, P.G.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Preliminary Sampling and Analysis Plan for Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 112
DOCUMENT DATE: 01/14/87
NUMBER OF PAGES: 003
AUTHOR: Larry B. Feldcamp, Chairman, Sheridan Site Steering Committee
COMPANY/AGENCY: Baker & Botts
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Signed Administrative Orders from listed Respondents

DOCUMENT NUMBER: 113
DOCUMENT DATE: 01/22/87
NUMBER OF PAGES: 016
AUTHOR: John Bine, P.E., Senior Project Engineer
COMPANY/AGENCY: ERT
RECIPIENT: Ruth Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: A comparison of PCB; a discussion of sampling procedures used by Resource Engineering in field investigations of sludge depth

DOCUMENT NUMBER: 114
DOCUMENT DATE: 02/03/87
NUMBER OF PAGES: 107
AUTHOR: Frances E. Phillips, Acting Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Respondents as listed in Attachment A
DOCUMENT TYPE: Administrative Order on Consent
DOCUMENT TITLE: Objectives of Order are (A) to determine the nature/extent of threat if any to public health by means of an RI or (B) to determine the necessity for remedial action by means of a FS

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 115
DOCUMENT DATE: 02/13/87
NUMBER OF PAGES: 037
AUTHOR: Mark Larson, Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: The first monthly groundwater sampling effort performed by Environment Resources' Management at the Sheridan Disposal Service site, January 22 and 23, 1987

DOCUMENT NUMBER: 116
DOCUMENT DATE: 02/26/87
NUMBER OF PAGES: 019
AUTHOR: Mark Larson, Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Second monthly groundwater Sampling Activities for Sheridan Disposal Service site

DOCUMENT NUMBER: 117
DOCUMENT DATE: 02/26/87
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, c/o ERM-Southwest, Site Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: PCB Split Samples, Sludge Sampling Procedures, and depth of contamination of the soil

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068132147

DOCUMENT NUMBER: 118
DOCUMENT DATE: 03/18/87
NUMBER OF PAGES: 003
AUTHOR: Jean Zimmerman, Project Coordinator
COMPANY/AGENCY: Rocky Mountain Analytical Laboratory
RECIPIENT: Scott McDonald, ERM-Southwest, Inc.
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Corrected report for Rocky Mountain Analytical Labs Project No. 63083; sample No. 09 and No. 10 were reanalyzed for TOX

DOCUMENT NUMBER: 119
DOCUMENT DATE: 03/24/87
NUMBER OF PAGES: 002
AUTHOR: Robert T. Stewart
COMPANY/AGENCY: Jones, Day, Reavis & Pogue
RECIPIENT: Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Agreement to Access executed by the property owners, the Sheridan's, to provide EPA access to the disposal site

DOCUMENT NUMBER: 120
DOCUMENT DATE: 03/26/87
NUMBER OF PAGES: 001
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry Feldcamp, Baker & Botts
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: EPA's comments on the Groundwater Migration Management Remedial Investigation Work Plan for the Sheridan Disposal Service site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 121
DOCUMENT DATE: 03/31/87
NUMBER OF PAGES: 012
AUTHOR: Mark J. Larson, Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Groundwater Sampling activities at Sheridan Disposal Services, Hempstead, TX

DOCUMENT NUMBER: 122
DOCUMENT DATE: 04/01/87
NUMBER OF PAGES: 007
AUTHOR: Mark J. Larson, Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Copies of the EPA Chain-of-Custody Records and SAS Packing List; and, regarding internal analysis that were performed with the field instruments employed during the sampling effort

DOCUMENT NUMBER: 123
DOCUMENT DATE: 04/10/87
NUMBER OF PAGES: 004
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Status Report for 03/87; and the sample results from the January and February sample activities

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 124
DOCUMENT DATE: 04/16/87
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Carl Hickan, Regional Represenative, Agency for Toxic Substance and Disease Registry
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Request for evaluation of Sheridan Disposal Service site Rat Acute Toxicity Test

DOCUMENT NUMBER: 125
DOCUMENT DATE: 04/16/87
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterrell, P.E., Project Manager, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Disposal Service Meeting held on 04/10/87, to discuss the Agency's comments on the Groundwater Migration Management Remedial Investigation Work Plan

DOCUMENT NUMBER: 126
DOCUMENT DATE: 04/20/87
NUMBER OF PAGES: 023
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Sheridan Site Steering Committee Project Manager
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: EPA comments on the Sheridan Disposal Service Source Control Remedial Investigation Report

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 127
DOCUMENT DATE: 05/06/87
NUMBER OF PAGES: 003
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, U.S. EPA Region VI
DOCUMENT TYPE: [illegible] Report
DOCUMENT TITLE: Cover letter with attached Sheridan Site Committee Technical Status Report for April, 1988

DOCUMENT NUMBER: 128
DOCUMENT DATE: 05/11/87
NUMBER OF PAGES: 040
AUTHOR: Edward Fry, Technical Assistance Team
COMPANY/AGENCY: Ecology & Environment, Inc,
RECIPIENT: J. Chris Peterson, Deputy Project Officer, U.S. EPA Region VI
DOCUMENT TYPE: Report
DOCUMENT TITLE: Site Assessment Report for the Sheridan Disposal Service site prepared for EPA's Emergency Response Branch

DOCUMENT NUMBER: 129
DOCUMENT DATE: 05/15/87
NUMBER OF PAGES: 008
AUTHOR: Harry C. Day, Jr., Hydrogeologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Groundwater Sampling Activities for the Sheridan Disposal Service Site, Hempstead, TX

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 130
DOCUMENT DATE: 06/01/87
NUMBER OF PAGES: 544
AUTHOR: Staff Engineers
COMPANY/AGENCY: Resource Engineering for Sheridan Site Steering Committee
RECIPIENT: U.S. EPA Region VI Site Files/Texas Water Commission
DOCUMENT TYPE: Report
DOCUMENT TITLE: Source Control Remedial Investigation Report for Sheridan Disposal Service Site Appendix Volume I

DOCUMENT NUMBER: 131
DOCUMENT DATE: 06/01/87
NUMBER OF PAGES: 472
AUTHOR: Resource Engineering for Sheridan Site Steering Committee
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files/Texas Water Commission
DOCUMENT TYPE: Report
DOCUMENT TITLE: Source Control Remedial Investigation Report for the Sheridan Disposal Service site, Appendices Volume II

DOCUMENT NUMBER: 132
DOCUMENT DATE: 06/01/87
NUMBER OF PAGES: 545
AUTHOR: Staff Engineers
COMPANY/AGENCY: Resource Engineering for Sheridan Site Steering Committee
RECIPIENT: U.S. EPA Region VI Site Files/Texas Water Commission
DOCUMENT TYPE: Report
DOCUMENT TITLE: Source Control Remedial Investigation Report for the Sheridan Disposal Service site Appendices, Volume III

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 133
DOCUMENT DATE: 06/08/87
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Doug Diehl, ERM-Southwest, Inc.
DOCUMENT TYPE: Transmitted Correspondence
DOCUMENT TITLE: Re: Amended Soils and Sludge Investigations for Sheridan Disposal Service Superfund site in Hempstead, TX

DOCUMENT NUMBER: 134
DOCUMENT DATE: 06/09/87
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Disposal Service site Work Plan for the Groundwater Migration Management Remedial Investigation

DOCUMENT NUMBER: 135
DOCUMENT DATE: 06/15/87
NUMBER OF PAGES: 002
AUTHOR: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Meeting held to discuss EPA's comments on the Work Plan for Disposal of Impoundment Water in the evaporation system

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 136
DOCUMENT DATE: 06/17/87
NUMBER OF PAGES: 001
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Sheridan Site Steering Committee, Baker & Botts
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Work Plan for Field Studies Supporting Risk Assessment and Source Control Feasibility Studies, Sheridan Disposal Service site

DOCUMENT NUMBER: 137
DOCUMENT DATE: 06/18/87
NUMBER OF PAGES: 029
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Work Plan
DOCUMENT TITLE: Work Plan For Field Studies Supporting Risk Assessment and Source Control Feasibility Studies

DOCUMENT NUMBER: 138
DOCUMENT DATE: 06/18/87
NUMBER OF PAGES: 002
AUTHOR: Chris E. Tanner, P.E.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Requested changes to the Work Plan for Disposal of Impoundment of Water, 06/09/87; and, the Work Plan for Field Studies Supporting Risk Assessment and Source Control Feasibility Studies, 06/11/87

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 063132147

DOCUMENT NUMBER: 139
DOCUMENT DATE: 07/01/87
NUMBER OF PAGES: 386
AUTHOR: Staff Engineers
COMPANY/AGENCY: Resource Engineering for Sheridan Site Steering Committee
RECIPIENT: U.S. EPA Region VI Site Files/Texas Water Commission
DOCUMENT TYPE: Report
DOCUMENT TITLE: Source Control Remedial Investigation for Sheridan Disposal Service site

DOCUMENT NUMBER: 140
DOCUMENT DATE: 07/01/87
NUMBER OF PAGES: 005
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Approval of Source Control Remedial Investigation (RI), for Sheridan Disposal Service site

DOCUMENT NUMBER: 141
DOCUMENT DATE: 07/02/87
NUMBER OF PAGES: 009
AUTHOR: Edward Fry, Technical Assistance Team
COMPANY/AGENCY: Ecology & Environment, Inc.
RECIPIENT: J. Chris Peterson, Deputy Project Officer, U.S. EPA Region VI
DOCUMENT TYPE: Report
DOCUMENT TITLE: Re: Report on the Freeboard Check at the Sheridan Disposal Service Site; and trip narrative photographs and attachments

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 142
DOCUMENT DATE: 07/02/87
NUMBER OF PAGES: 004
AUTHOR: Eugene Harris, Land Pollution Control Div., Edwin Barth and Ronald Lewis, RAS, Containment Branch
COMPANY/AGENCY: U.S. EPA, Office of Research and Development, Hazardous Waste Engineering Research Laboratory
RECIPIENT: Robert Hannesschlager, Chief, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Memorandums
DOCUMENT TITLE: Attached memos regarding Review of Proposed Treatability Studies for the Sheridan site; and, Technical Comments for the Sheridan Disposal Service Superfund site, in Hempstead, TX

DOCUMENT NUMBER: 143
DOCUMENT DATE: 07/08/87
NUMBER OF PAGES: 047
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Respondents as Listed in Attachment A
DOCUMENT TYPE: Administrative Order
DOCUMENT TITLE: (1) Respondents shall appoint a Facility Coordinator to be responsible for oversight of activities required by Order, (2) Respondents shall lower level of contaminated stormwater in disposal pond

DOCUMENT NUMBER: 144
DOCUMENT DATE: 07/09/87
NUMBER OF PAGES: 021
AUTHOR: Anne Harrington, Hydrogelogist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Oversight of Sludge Sampling for the Sheridan Disposal Service site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 145
DOCUMENT DATE: 07/09/87
NUMBER OF PAGES: 023
AUTHOR: Robin Sequin, Environmental Scientist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Groundwater and Soil Evaporation System Borings Sampling Activities for the Sheridan Disposal Service site, Hempstead, TX

DOCUMENT NUMBER: 146
DOCUMENT DATE: 07/10/87
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Sheridan Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Comments on the Proposed Treatability Studies for the Sheridan Disposal Service Site

DOCUMENT NUMBER: 147
DOCUMENT DATE: 07/16/87
NUMBER OF PAGES: 020
AUTHOR: Rashid Khalid, Soil Scientist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attachments
DOCUMENT TITLE: Groundwater Sampling / Conductivity Survey for Sheridan Disposal Service site, Hempstead, TX

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062138147

DOCUMENT NUMBER: 148
DOCUMENT DATE: 07/17/87
NUMBER OF PAGES: 002
AUTHOR: Robert T. Stewart, Vice Chairman
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Implementation of the Sheridan Disposal Service site Administrative Order on Consent by the Sheridan Site Steering Committee

DOCUMENT NUMBER: 149
DOCUMENT DATE: 07/17/87
NUMBER OF PAGES: 051
AUTHOR: Robin Sequin, Environmental Scientist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Dike Soil Borings Sampling Activities for the Sheridan Disposal Service site Hempstead, TX

DOCUMENT NUMBER: 150
DOCUMENT DATE: 07/17/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 01 - PRP Monitoring
DOCUMENT TITLE: Re: Implementation of the proposed work plan began July 13, 1987. Site preparation is being done so the pumping action can begin.

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 151
DOCUMENT DATE: 07/21/87
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Trip Report
DOCUMENT TITLE: Trip to oversee the installation of monitoring wells by the Potentially Responsible Parties of Sheridan Disposal Service site

DOCUMENT NUMBER: 152
DOCUMENT DATE: 07/22/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 02 - PRP Monitoring
DOCUMENT TITLE: Re: Implementation of the proposed work plan is continuing.

DOCUMENT NUMBER: 153
DOCUMENT DATE: 07/27/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 03 - PRP Monitoring
DOCUMENT TITLE: Re: Pumping of the storm water in the containment lagoon began July 25, 1987.

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 154
DOCUMENT DATE: 07/29/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 04 - PRP Monitoring
DOCUMENT TITLE: Re: Pumping of storm water from the containment lagoon is continuing at the rate of approximately 400/gallons per minutes.

DOCUMENT NUMBER: 155
DOCUMENT DATE: 07/30/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 05 - PRP Monitoring
DOCUMENT TITLE: Re: Pumping of water from the containment lagoon at the Sheridan Disposal Service site has been halted.

DOCUMENT NUMBER: 156
DOCUMENT DATE: 08/05/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 06 - PRP Removal
DOCUMENT TITLE: Re: Pumping operations are still halted at the Sheridan Disposal Service site.

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062138147

DOCUMENT NUMBER: 157
DOCUMENT DATE: 08/08/87
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Gary W. Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Work Plan changes for the Sheridan Disposal Service site Waste Removal

DOCUMENT NUMBER: 158
DOCUMENT DATE: 08/08/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 07 - PRP Removal
DOCUMENT TITLE: Re: As of 11:00 hours, on August 8, 1987, pumping operations resumed at the Sheridan Disposal Service site at 10:15.

DOCUMENT NUMBER: 159
DOCUMENT DATE: 08/09/87
NUMBER OF PAGES: 010
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Sheridan Site Steering Committee monthly status report for July, 1987

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 163
DOCUMENT DATE: 08/14/87
NUMBER OF PAGES: 454
AUTHOR: Staff Consultants
COMPANY/AGENCY: Spectrix Corporation
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Reports
DOCUMENT TITLE: Case No. 7558: Part II of III; EPA split samples - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

DOCUMENT NUMBER: 164
DOCUMENT DATE: 08/14/87
NUMBER OF PAGES: 561
AUTHOR: Staff Consultants
COMPANY/AGENCY: Spectrix Corporation
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Reports
DOCUMENT TITLE: Case No. 7558: Part III of III; EPA split samples - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

DOCUMENT NUMBER: 165
DOCUMENT DATE: 08/14/87
NUMBER OF PAGES: 402
AUTHOR: Michael Daggett, Chief, Organic Lab, Houston Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Keith Bradley, Hazardous Waste Section, U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Report
DOCUMENT TITLE: Case No. 7483: CLP Data Review for split samples FG001 and FG002 (Available for review at U.S. EPA Region VI, Dallas, TX)

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068132147

DOCUMENT NUMBER: 166
DOCUMENT DATE: 08/21/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 09 - PRP Removal
DOCUMENT TITLE: Re: Pumping is proceeding without incident at the Sheridan Disposal Service site.

DOCUMENT NUMBER: 167
DOCUMENT DATE: 08/24/87
NUMBER OF PAGES: 004
AUTHOR: W.F. Buchholtz
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Rolf Norstrum, Office of the Honorable M. Sweeney, U.S. House of Represenatives
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: A current background report on the activities being conducted by the Sheridan Site Steering Committee at the Sheridan Disposal Service Site

DOCUMENT NUMBER: 168
DOCUMENT DATE: 08/27/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 10 - PRP Removal
DOCUMENT TITLE: Re: Pumping operations at the Sheridan Disposal Service site have ceased, due to mechanical failure of the pump.

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 169
DOCUMENT DATE: 09/03/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 11 - PRP Removal
DOCUMENT TITLE: Re: Pumping operations at the Sheridan Disposal Service site are still halted, due to the unwillingness of the rental company, to repair the pump.

DOCUMENT NUMBER: 170
DOCUMENT DATE: 09/05/87
NUMBER OF PAGES: 003
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Site Committee Status Report for August, 1987, provided by the site committee

DOCUMENT NUMBER: 171
DOCUMENT DATE: 09/10/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 12 - PRP Removal
DOCUMENT TITLE: Re: Pumping operations have ceased at the Sheridan Disposal Service site. The water level of the lagoon was lowered to a point, that continued pumping is no longer necessary.

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 172
DOCUMENT DATE: 09/17/87
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Polrep No. 13 - PRP Removal
DOCUMENT TITLE: Re: All emergency pumping operations at the Sheridan Disposal Service site are now complete and that all objectives of the administrative order were met

DOCUMENT NUMBER: 173
DOCUMENT DATE: 09/17/87
NUMBER OF PAGES: 001
AUTHOR: Ruth Israeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Carl Hickam, Regional Represenative, Agency for Toxic Substance and Disease Registry
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Sheridan Disposal Services Endangerment Assessment given to Mr. Hickam for his review

DOCUMENT NUMBER: 174
DOCUMENT DATE: 09/21/87
NUMBER OF PAGES: 142
AUTHOR: Michael Daggett, Chief, Organic Lab Section, Houston Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Keith Bradley, Hazardous Waste Section, U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Report
DOCUMENT TITLE: Case No. 3106F: Lab raw data results for organic samples 3106F-02, 3106F-04, 3106F-06, 3106F-08, 3106F-10 (Available for review at U.S. EPA Region VI, Dallas, TX)

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 175
DOCUMENT DATE: 09/28/87
NUMBER OF PAGES: 022
AUTHOR: Robin Sequin, Environmental Scientist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Inorganic Traffic Reports MFF 201 - 205, and FG 004 - FG 015; SAS No. 31067, and Chain of Custody Records 6-13217 & 6-13218, D1113 & D1114

DOCUMENT NUMBER: 176
DOCUMENT DATE: 10/07/87
NUMBER OF PAGES: 061
AUTHOR: Donald W. Beaver, Ph.D., Senior Geohydrologist
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Oversight of Well Installations Report for Sheridan Disposal Services site, July 15 - August 8, 1987

DOCUMENT NUMBER: 177
DOCUMENT DATE: 10/08/87
NUMBER OF PAGES: 002
AUTHOR: George L. Pettigrew, Regional Representative of ATSDR, Region VI
COMPANY/AGENCY: Department of Health and Human Services
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Health consultation regarding Sheridan Disposal Service site, Hempstead, TX

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 178
DOCUMENT DATE: 10/08/87
NUMBER OF PAGES: 003
AUTHOR: John M. Cotterell. P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Disposal Service Status Report for September, 1987, provided by the site committee

DOCUMENT NUMBER: 179
DOCUMENT DATE: 10/09/87
NUMBER OF PAGES: 007
AUTHOR: Chris E. Tanner, P.E.
COMPANY/AGENCY: ERM - Southwest, Inc.
RECIPIENT: Gary Guerra, On-Scene Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Review of operations of the evaporation system at the Sheridan Disposal Systems site in Hempstead, TX

DOCUMENT NUMBER: 180
DOCUMENT DATE: 10/14/87
NUMBER OF PAGES: 011
AUTHOR: Donald W. Beaver, Work Assignment Manager
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Review of Risk Assessment for Sheridan Disposal Service site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 101
DOCUMENT DATE: 10/21/87
NUMBER OF PAGES: 023
AUTHOR: Ruth L. Izraeli, Remecial Project Manager/Donald W. Beaver, Work Assignment Manager
COMPANY/AGENCY: U.S. EPA Region VI/Jacobs Engineering Group, Inc.
RECIPIENT: Sheridan Site Steering Committee
DOCUMENT TYPE: Comments and Attachments
DOCUMENT TITLE: Comments on the Risk Assessment for the Sheridan Disposal Service site dated 09/15/87, by EPA and Jacobs Engineering Group

DOCUMENT NUMBER: 102
DOCUMENT DATE: 10/21/87
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Review of the Risk Assessment for the Sheridan site; comments on the document drafted by EPA's contractor and the Remecial Project Manager

DOCUMENT NUMBER: 103
DOCUMENT DATE: 10/28/87
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Discusses need for the Source Control Remedial Investigation/Feasibility Study schedule

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 184
DOCUMENT DATE: 10/28/87
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Letter to confirm 10/23/87 conversation regarding EPA's comments on the Sheridan site

DOCUMENT NUMBER: 185
DOCUMENT DATE: 10/30/87
NUMBER OF PAGES: 001
AUTHOR: Joe Brown, Remedial Investigation Unit, Superfund Section, Hazardous and Solid Waste Division
COMPANY/AGENCY: Texas Water Commission
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Comments on the Draft Risk Assessment for the Sheridan site

DOCUMENT NUMBER: 186
DOCUMENT DATE: 10/30/87
NUMBER OF PAGES: 697
AUTHOR: Staff Consultants
COMPANY/AGENCY: Unspecified
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Report
DOCUMENT TITLE: Case No. 8322: Part I of III; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 187
DOCUMENT DATE: 10/30/87
NUMBER OF PAGES: 617
AUTHOR: Staff Consultants
COMPANY/AGENCY: Unspecified
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Reports
DOCUMENT TITLE: Case No. 8322: Part II of III; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

DOCUMENT NUMBER: 188
DOCUMENT DATE: 10/30/87
NUMBER OF PAGES: 695
AUTHOR: Staff Consultants
COMPANY/AGENCY: Unspecified
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Laboratory Reports
DOCUMENT TITLE: Case No. 8322: Part III of III; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, TX)

DOCUMENT NUMBER: 189
DOCUMENT DATE: 11/05/87
NUMBER OF PAGES: 003
AUTHOR: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of list of potential treatment and containment/disposal technologies

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 190
DOCUMENT DATE: 11/05/87
NUMBER OF PAGES: 004
AUTHOR: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of the Source Control Feasibility Study - Modified Schedule for the Sheridan site

DOCUMENT NUMBER: 191
DOCUMENT DATE: 11/05/87
NUMBER OF PAGES: 027
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Work Plan
DOCUMENT TITLE: Work Plan for Phase 2 Biodegradation Studies for Source Control Feasibility Study

DOCUMENT NUMBER: 192
DOCUMENT DATE: 11/05/87
NUMBER OF PAGES: 019
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Respondents as Listed in Attachment A
DOCUMENT TYPE: First Amendment to Administrative Order
DOCUMENT TITLE: Purpose of Amendment is to (1) include fifty-eight additional Respondents and (2) to modify the finding of facts to add chemical wastes which were disposed of at the site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 193
DOCUMENT DATE: 11/06/87
NUMBER OF PAGES: 006
AUTHOR: Chris E. Tanner, Sample Personnel
COMPANY/AGENCY: ERM - Southwest, Inc.
RECIPIENT: John Cotterell, Site Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Comments by Ruth Izraeli, on the Treatment Studies that was done in July, 1987 at the Sheridan Disposal Service site

DOCUMENT NUMBER: 194
DOCUMENT DATE: 11/13/87
NUMBER OF PAGES: 001
AUTHOR: Robert E. Hannesschlager, P.E., Chief, Superfund Enforcement Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Eugene F. Harris, Technical Assistance Coordinator, Land Pollution Control Div., U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Transmittal for review a Work Plan for Phase 2 biodegradation studies, a Response to EPA (including HWERL) comments on the Phase I Treatability Testing Work Plan

DOCUMENT NUMBER: 195
DOCUMENT DATE: 11/14/87
NUMBER OF PAGES: 002
AUTHOR: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of response to EPA comments on the draft Risk Assessment for the Sheridan site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 196
DOCUMENT DATE: 11/30/87
NUMBER OF PAGES: 008
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Respondents as Listed in Attachment A
DOCUMENT TYPE: First Amendment to A/O on Consent
DOCUMENT TITLE: Objectives of Order are to (1) allow for an Endangerment Assessment, (2) increase amount of stipulated penalties, and (3) modify A/O on Consent Respondents List by adding Respondents to list

DOCUMENT NUMBER: 197
DOCUMENT DATE: 12/02/87
NUMBER OF PAGES: 006
AUTHOR: Dr. Rajagopal Krishnamoorthy
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Comments on the Work Plan for the Phase 2 Biodegradation Studies for Source Control Feasibility Study at the Sheridan Disposal Service site

DOCUMENT NUMBER: 198
DOCUMENT DATE: 12/02/87
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Superfund Enforcement Section, Remedial Project Manager
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Site Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Disposal Services Baseline Risk Assessment Revision, that were discussed in the November 20, 1987 meeting regarding this site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 199
DOCUMENT DATE: 12/03/87
NUMBER OF PAGES: 004
AUTHOR: John Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Steering Committee
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Analytical Results of the groundwater sampling at the Sheridan Disposal Service site

DOCUMENT NUMBER: 200
DOCUMENT DATE: 12/04/87
NUMBER OF PAGES: 009
AUTHOR: Charles A. Gates, Chief, Emergency Response Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert Hannesschlager, Chief, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attached Report
DOCUMENT TITLE: The on-scene coordinator's (Gary Guerra) After Action Report, and the removal file for the the removal action taken at the Sheridan Disposal Service site

DOCUMENT NUMBER: 201
DOCUMENT DATE: 12/08/87
NUMBER OF PAGES: 002
AUTHOR: Robert E. Hannesschlager, P.E., Chief, Superfund Enforcement Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Provisions in SARA, that will affect the Remedial Investigation and Feasibility Study for the Sheridan Disposal Service site, that the PRP's are conducting under the Administrative Order

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 202
DOCUMENT DATE: 12/09/87
NUMBER OF PAGES: 003
AUTHOR: Ronald F. Lewis, Microbiologist, Remedial Action Staff, Containment Branch
COMPANY/AGENCY: Land Pollution Control Division, U.S. EPA Region VI
RECIPIENT: [illegible] Hannesschlager, Chief, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Review of the work plan for Phase 2 Biodegradation Studies for the Remedial Investigation/Feasibility Study at the Sheridan Disposal Service National Priorities List site

DOCUMENT NUMBER: 203
DOCUMENT DATE: 12/10/87
NUMBER OF PAGES: 004
AUTHOR: Richard H. Fuller P.G.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of map of proposed boring locations for the evaporative system at the Sheridan site

DOCUMENT NUMBER: 204
DOCUMENT DATE: 12/11/87
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Confirmation of 12/07/87 discussions regarding timing and scope of the second priority pollutant groundwater sampling event and the background and evaporative-system soil sampling

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 205
DOCUMENT DATE: 12/11/87
NUMBER OF PAGES:
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Unspecified
DOCUMENT TYPE:
DOCUMENT TITLE: This document was deleted prior to shipment, per Ruth Izraeli, Remedial Project Manager, request.

DOCUMENT NUMBER: 206
DOCUMENT DATE: 12/18/87
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Confirmation of results of 12/15/87 conference call discussing ERM-Southwest's proposal for the number and location of samples to be obtained from the evaporation system; map attached

DOCUMENT NUMBER: 207
DOCUMENT DATE: 12/28/87
NUMBER OF PAGES: 002
AUTHOR: Richard H. Fuller, P.G.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Modification to the Background Soil Boring and Evaporation System Sampling Programs at the Sheridan site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 208
DOCUMENT DATE: 12/29/87
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Groundwater samples taken 10/28-30/87 by ERM-Southwest staff

DOCUMENT NUMBER: 209
DOCUMENT DATE: 01/04/88
NUMBER OF PAGES: 001
AUTHOR: Chris E. Tanner, P.E.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Notification of sampling effort on 01/29/88 as identified in Work Plan for Biodegradation Studies

DOCUMENT NUMBER: 210
DOCUMENT DATE: 01/04/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Follow-up on discussions of background samples, borings and soil samples for the Sheridan site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 211
DOCUMENT DATE: 01/05/88
NUMBER OF PAGES: 006
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Comments and suggestions on the Work Plan for Phase 2 Biodegradation Studies dated 11/05/87

DOCUMENT NUMBER: 212
DOCUMENT DATE: 01/09/88
NUMBER OF PAGES: 002
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Confirmation of 01/05/88 telephone conversation to review problems encountered with the additional modeling for the Endangerment Assessment

DOCUMENT NUMBER: 213
DOCUMENT DATE: 01/23/88
NUMBER OF PAGES: 001
AUTHOR: Richard Fuller, P.G.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of "Baseline Endangerment Assessment" for the Sheridan site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 214
DOCUMENT DATE: 01/26/88
NUMBER OF PAGES: 006
AUTHOR: Richard H. Fuller, P.G.
COMPANY/AGENCY: ERM - Southwest, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Analytical Results of Background and Evaporation System Soil Borings for the Sheridan Disposal Service site, in Hempstead, TX

DOCUMENT NUMBER: 215
DOCUMENT DATE: 02/05/88
NUMBER OF PAGES: 005
AUTHOR: Gary Miller
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: The trip report for Ec Groves oversite of the November and December aquifer tests at the Sheridan Disposal Service site

DOCUMENT NUMBER: 216
DOCUMENT DATE: 02/09/88
NUMBER OF PAGES: 001
AUTHOR: Donald W. Beaver, Work Assignment Manager
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Review comments for "Baseline Endangerment Assessment" for the Sheridan site prepared by ERM-Southwest, Inc.

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 217
DOCUMENT DATE: 02/09/88
NUMBER OF PAGES: 034
AUTHOR: Bruce H. Clarke, Chris Tanner, P.E., and Douglas Diehl, P.E., President
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: Phase I Biological Treatability Report for Source Control Feasibility Study

DOCUMENT NUMBER: 218
DOCUMENT DATE: 02/11/88
NUMBER OF PAGES: 014
AUTHOR: Gary Miller
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth Izraeli, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Field Oversight Report for Verification/Oversight Background/Evaporation Pond Sampling, December 28-30, 1987

DOCUMENT NUMBER: 219
DOCUMENT DATE: 02/18/88
NUMBER OF PAGES: 001
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Bill Hansen, Chief, Site Policy & Guidance Branch, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Request for evaluation of Soil Cleanup criteria concerning PCB's, which may be relevent and appropriate for the Sheridan Disposal Service site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 220
DOCUMENT DATE: 02/24/88
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Greg Tipple, Remedial Investigation Unit Superfund Section, Texas Water Commission
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Request for State ARARs, particularly in regards to in-place closure (capping) of wastes which contain from 50 to 200 ppm of polychlorinated biphenyls

DOCUMENT NUMBER: 221
DOCUMENT DATE: 02/24/88
NUMBER OF PAGES: 002
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Review of Sheridan Disposal Services-Phase I Biological Treatability Report

DOCUMENT NUMBER: 222
DOCUMENT DATE: 02/25/88
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Purpose of letter is to confirm conference call of 02/16/88 and 02/18/88 and to discuss the submittal schedule for the final Sheridan Risk Assessment

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 223
DOCUMENT DATE: 02/26/88
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: [illegible] and Attachment
DOCUMENT TITLE: Meeting Summary, Sheridan Site Committee requested the meeting to hand-deliver the draft Feasibility Study and present an overview of the document, attached list of attendees

DOCUMENT NUMBER: 224
DOCUMENT DATE: 02/26/88
NUMBER OF PAGES: 002
AUTHOR: Roxanne Burkey, Information Center
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Records Transmittal and Receipt
DOCUMENT TITLE: Re: Shipment of groundwater samples for the Sheridan Disposal Service Superfund site

DOCUMENT NUMBER: 225
DOCUMENT DATE: 02/29/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Discusses submittal date for revised Source Control Risk Assessment for the Sheridan site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 226
DOCUMENT DATE: 03/16/88
NUMBER OF PAGES: 007
AUTHOR: Bill Hanson, Chief, Site Policy & Guidance Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Larry D. Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attachment
DOCUMENT TITLE: Evaluation of the potential relevant and appropriate soil cleanup criteria; attachment regarding PCBs-Background and Current Interpretations revised 02/21/88

DOCUMENT NUMBER: 227
DOCUMENT DATE: 03/17/88
NUMBER OF PAGES: 002
AUTHOR: Larry E. Feldcamp, Chairman, Sheridan Site Steering Committee
COMPANY/AGENCY: Baker & Botts
RECIPIENT: Larry D. Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Disposal Service oversight on Cost Documentation as required by the Administrative Order on Consent

DOCUMENT NUMBER: 228
DOCUMENT DATE: 03/18/88
NUMBER OF PAGES: 002
AUTHOR: Jerry Greenbaum, P.E., Review Team Project Manager
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of draft review comments on the Source Control Feasibility Study prepared by ERM-Southwest, Inc.

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 229
DOCUMENT DATE: 03/21/88
NUMBER OF PAGES: 131
AUTHOR: Greg Tipple, Remedial Investigation Unit Head, Superfund Section, Hazardous and Solid Waste Division
COMPANY/AGENCY: Texas Water Commission
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of the current State Surface Water Quality Standards and proposed State Surface Water Quality Regulations

DOCUMENT NUMBER: 230
DOCUMENT DATE: 03/22/88
NUMBER OF PAGES: 700
AUTHOR: Michael L. Daggett, Chief, Organic Lab Section
COMPANY/AGENCY: U.S. EPA Region VI, Houston Branch
RECIPIENT: Jo Ann Miller, U.S. EPA Region VI
DOCUMENT TYPE: CLP Data Review
DOCUMENT TITLE: Case No. 8893: Organic Samples FG 01E, FG 017 and FG 018; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

DOCUMENT NUMBER: 231
DOCUMENT DATE: 03/24/88
NUMBER OF PAGES: 520
AUTHOR: Staff Consultants
COMPANY/AGENCY: ETC - Taxicon
RECIPIENT: Jo Ann Miller, U.S. EPA Region VI
DOCUMENT TYPE: Laboratory Reports
DOCUMENT TITLE: Case No. 8770: Part I of II; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, Texas)

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 232
DOCUMENT DATE: 03/24/88
NUMBER OF PAGES: 261
AUTHOR: Staff Consultants
COMPANY/AGENCY: Unspecified
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Laboratory Data
DOCUMENT TITLE: Case No. 8770: Part II of II; EPA split sample data - QA/QC Documentation (Available for review at U.S. EPA Region VI, Dallas, TX)

DOCUMENT NUMBER: 233
DOCUMENT DATE: 04/06/88
NUMBER OF PAGES: 039
AUTHOR: Larry Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Site Project Manager, Sheridan Site Steering Committee
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: EPA's completion of the review of the draft Feasibility Study submitted on February 22, 1988; which includes comments that EPA would like addressed in the revision

DOCUMENT NUMBER: 234
DOCUMENT DATE: 04/10/88
NUMBER OF PAGES: 003
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remecial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal for Sheridan Site Committee Technical Status Report for March 1988

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 235
DOCUMENT DATE: 04/11/88
NUMBER OF PAGES: 037
AUTHOR: Greg Tipple, Remedial Investigation Unit Head, Superfund Section, Hazardous & Solid Waste Division
COMPANY/AGENCY: Texas Water Commission
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Applicable or Relevant and Approriate Requirements received from the Texas Air Control Board, Railroad Commission of Texas, and Texas Dept. of Health; and, comments on the Source Control FS

DOCUMENT NUMBER: 236
DOCUMENT DATE: 04/12/88
NUMBER OF PAGES: 002
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of Results of Additional Evaporation System Soil Sampling dated 02/01/88

DOCUMENT NUMBER: 237
DOCUMENT DATE: 04/12/88
NUMBER OF PAGES: 001
AUTHOR: Donald W. Beaver, Work Assignment Manager
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of review comments on the "Baseline Risk Assessment, Sheridan Disposal Services Site" prepared by ERM-Southwest, Inc., dated 03/14/88

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 238
DOCUMENT DATE: 04/18/88
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Site Project Manager, [illegible] Site Steering Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Meeting held to discuss the questions and Agency comments on the Source Control Feasibility Study, and to allow EPA to restate the major areas of deficiency of the draft Feasibility Study

DOCUMENT NUMBER: 239
DOCUMENT DATE: 04/28/88
NUMBER OF PAGES: 009
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Sheridan Site Steering Committee
DOCUMENT TYPE: Summary
DOCUMENT TITLE: Baseline Risk Assessment Comments for the Sheridan Disposal Service site Draft of March 14, 1988; Revised Comments for April, 1988

DOCUMENT NUMBER: 240
DOCUMENT DATE: 05/04/88
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI File
DOCUMENT TYPE: Memorandum and Attachment
DOCUMENT TITLE: Meeting summary; purpose of meeting was to discuss the revision of the Source Control Feasibility Study, attached list of attendees

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 241
DOCUMENT DATE: 05/06/88
NUMBER OF PAGES: 001
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert Stewart, Jones, Day, Reavis & Pogue
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: EPA concluded that proposed additional testing, as requested, is not necessary to complete the Feasibility Study or to select the remedial alternative

DOCUMENT NUMBER: 242
DOCUMENT DATE: 05/10/88
NUMBER OF PAGES: 007
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Cover letter for data summaries from the Sheridan Disposal Site Phase 1 and Phase 2 Biodegradation Studies

DOCUMENT NUMBER: 243
DOCUMENT DATE: 05/10/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ed Barth, HWERL
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Transmittal of full results of PRPs Phase I program and partial results from their Phase II program regarding sludge biotreatability testing in batch reactors: request for technical assistance

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 244
DOCUMENT DATE: 05/11/88
NUMBER OF PAGES: 002
AUTHOR: Dr. Rajagopal Krishnamoorthy
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Comments from review of the laboratory results of the stabilization and solvent extraction testing raw data packages

DOCUMENT NUMBER: 245
DOCUMENT DATE: 05/12/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Cover letter for copy of summary table referenced in the Risk Assessment Comments

DOCUMENT NUMBER: 246
DOCUMENT DATE: 05/18/88
NUMBER OF PAGES: 002
AUTHOR: Kenneth A. Dostal, Environmental Engineer
COMPANY/AGENCY: U.S. EPA, Office of Research and Development, Water Engineering Research Laboratory
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Comments on the "Phase I Biological Treatability Report for Source Control Feasibility Study"

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 247
DOCUMENT DATE: 05/19/88
NUMBER OF PAGES: 002
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Larry D. Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Technical information and details for the proposed treatability studies to provide support for the Source Control Feasibility Study

DOCUMENT NUMBER: 248
DOCUMENT DATE: 05/20/88
NUMBER OF PAGES: 006
AUTHOR: Douglas A. Austin, Manager-Business Development
COMPANY/AGENCY: Resources Conservation Company
RECIPIENT: Jerry Greenbaum, Jacobs Engineering Group Inc.
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Information regarding various lagoon closure options at Sheridan Disposal Site

DOCUMENT NUMBER: 249
DOCUMENT DATE: 05/23/88
NUMBER OF PAGES: 005
AUTHOR: Robert T. Stewart, Vice Chairman
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Larry D. Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Request for additional meetings with U.S EPA Region VI; plan to submit revised interim Feasibility Study by 06/20/88; attached schedule to perform additional stabilization and biological studies

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 250
DOCUMENT DATE: 05/24/88
NUMBER OF PAGES: 002
AUTHOR: Fred Reitman, Toxicologist, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Discussion of soil clean-up levels for PCBs at the Sheridan Disposal Site

DOCUMENT NUMBER: 251
DOCUMENT DATE: 05/26/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Cover letter for preliminary workplan prepared by Davis L. Ford and Radian Corporation for a Biological Treatability Study; request for a meeting at Radian Corporation during the week of 06/06/88

DOCUMENT NUMBER: 252
DOCUMENT DATE: 06/01/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Discusses 05/16/88 meeting regarding conclusions of the biodegradation studies

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 253
DOCUMENT DATE: 06/03/88
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Meeting Attendance List
DOCUMENT TITLE: List of Attendees at the Sheridan Site Dispute Resolution Meeting Number 1 on 06/03/88

DOCUMENT NUMBER: 254
DOCUMENT DATE: 06/06/88
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert Stewart, Sheridan Site Committee Chairman, Jones, Day, Reavis & Pogue
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Response to 05/23/88 letter concerning Feasibility Study; meeting scheduled for 06/02/88 to resolve dispute concerning necessity of conducting additional treatibility testing before finaling the FS

DOCUMENT NUMBER: 255
DOCUMENT DATE: 06/06/88
NUMBER OF PAGES: 388
AUTHOR: Edward R. Bates, Physical Scientist
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Report
DOCUMENT TITLE: Draft Report on the RCC B.E.S.T. Processes as Evaluated During a 24-Hour Test Period at the General Refining Site near Savanah, Georgia

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 256
DOCUMENT DATE: 06/07/88
NUMBER OF PAGES: 002
AUTHOR: Sheridan Site Steering Committee
COMPANY/AGENCY: Unspecified
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Outline
DOCUMENT TITLE: Outline of Sludge and Soil Sampling Plan

DOCUMENT NUMBER: 257
DOCUMENT DATE: 06/09/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of a complete copy of the Interim Source Control Feasibility Study revised in response to EPA's comments

DOCUMENT NUMBER: 258
DOCUMENT DATE: 06/09/88
NUMBER OF PAGES: 002
AUTHOR: Norma J. Goldman, Principal
COMPANY/AGENCY: Unspecified
RECIPIENT: Ellen Greeney, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Initial monthly report of the community relations activity

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 259
DOCUMENT DATE: 06/10/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: [illegible]
DOCUMENT TITLE: Meeting with John M. Cotterell, Sheridan Site Committee to discuss EPA's comments on the biological treatability study and to reach agreement in general terms

DOCUMENT NUMBER: 260
DOCUMENT DATE: 06/10/88
NUMBER OF PAGES: 007
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Consolidated comments on the Sheridan site Work Plan for additional biological treatability study

DOCUMENT NUMBER: 261
DOCUMENT DATE: 06/13/88
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of a copy of Agency comments on the draft Biodegradation Work Plan for the Sheridan site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 262
DOCUMENT DATE: 06/28/88
NUMBER OF PAGES: 005
AUTHOR: Donald W. Beaver, Ph.D., Senior Geohydrologist
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Concerns review of the Baseline Risk Assessment prepared by the Sheridan Site Committee

DOCUMENT NUMBER: 263
DOCUMENT DATE: 06/29/88
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of attached Comments on Feasibility Study dated 06/09/88

DOCUMENT NUMBER: 264
DOCUMENT DATE: 06/30/88
NUMBER OF PAGES: 003
AUTHOR: Jerry Greenbaum
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: U.S. EPA Region VI
DOCUMENT TYPE: Comments
DOCUMENT TITLE: Comments on Phase 2 Stabilization Testing Work Plan 91-19 Sheridan Site, 06/21/88

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 265
DOCUMENT DATE: 06/30/88
NUMBER OF PAGES: 011
AUTHOR: Jerry Greenbaum, Review Team Project Manager
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Transmittal of the attached consolidated comments on the Interim Source Feasibility Study, Chapter 6 and Appendices A,D,E,F,and G.

DOCUMENT NUMBER: 266
DOCUMENT DATE: 07/01/88
NUMBER OF PAGES: 010
AUTHOR: Rajopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering, Inc.
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Comments
DOCUMENT TITLE: Comments on the Biotreatment Interim Feasibility Study for the Sheridan site

DOCUMENT NUMBER: 267
DOCUMENT DATE: 07/01/88
NUMBER OF PAGES: 003
AUTHOR: Fred Reitman, Toxicologist
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Comments
DOCUMENT TITLE: Comments on the Revised Sheridan Site Risk Assessment, prepared for the Sheridan Site Steering Committee

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068138147

DOCUMENT NUMBER: 268
DOCUMENT DATE: 07/01/88
NUMBER OF PAGES: 004
AUTHOR: Staff
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Residents of Hempstead, TX
DOCUMENT TYPE: Fact Sheet
DOCUMENT TITLE: Sheridan Site Fact Sheet; provides an overview of the Sheridan Site

DOCUMENT NUMBER: 269
DOCUMENT DATE: 07/07/88
NUMBER OF PAGES: 001
AUTHOR: Chris Tanner
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of leaching procedures that were identified as candidates for the subject studies

DOCUMENT NUMBER: 270
DOCUMENT DATE: 07/08/88
NUMBER OF PAGES: 019
AUTHOR: Joe Jowarnicky/Alex Lemmon
COMPANY/AGENCY: Metcalf & Eddy, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Comments
DOCUMENT TITLE: Evaluation and Comments on Feasibility Study Dated 06/09/88 prepared for the Sheridan Site Committee by ERM-Southwest, Inc.

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 271
DOCUMENT DATE: 07/08/88
NUMBER OF PAGES: 002
AUTHOR: Sheryl Quinn, Project Coordinator
COMPANY/AGENCY: Unspecified
RECIPIENT: Ellen Greeney, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Discusses community relations activities conducted during the month of June 1988 for the Sheridan site

DOCUMENT NUMBER: 272
DOCUMENT DATE: 07/08/88
NUMBER OF PAGES: 014
AUTHOR: Staff Consultants
COMPANY/AGENCY: Metcalf & Eddy, Inc. / Jacobs Engineering Group, Inc.
RECIPIENT: U.S. EPA Region VI Site Files and Sheridan Site Steering Committee
DOCUMENT TYPE: Draft Report
DOCUMENT TITLE: Evaluation and Comments on Chapter 6 of the Interim Source Feasibility Study dated June 9, 1988, prepared for the Sheridan Disposal Service Site Committee by ERM-Southwest

DOCUMENT NUMBER: 273
DOCUMENT DATE: 07/13/88
NUMBER OF PAGES: 054
AUTHOR: Douglas A. Austin, Director-Business Development
COMPANY/AGENCY: Resources Conservation Company
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Information regarding B.E.S.T. Process and its possible application at the Sheridan site

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SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 274
DOCUMENT DATE: 07/14/88
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Meeting Attendance List
DOCUMENT TITLE: List of attendees from Sheridan meeting on 07/14/88

DOCUMENT NUMBER: 275
DOCUMENT DATE: 07/15/88
NUMBER OF PAGES: 001
AUTHOR: John Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Israeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Draft Ground Water Migration Management Remedial Investigation Report

DOCUMENT NUMBER: 276
DOCUMENT DATE: 07/18/88
NUMBER OF PAGES: 001
AUTHOR: Unspecified
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Meeting Attendance List
DOCUMENT TITLE: List of attendees at Sheridan site meeting on 07/18/88

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 277
DOCUMENT DATE: 07/25/88
NUMBER OF PAGES: 001
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, [illegible] Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of comments on revised Work Plan for Sheridan Biological Treatability Study

DOCUMENT NUMBER: 278
DOCUMENT DATE: 07/25/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence w/o referenced enclosure
DOCUMENT TITLE: Sheridan Disposal Services Site - Risk Assessment; transmittal of marked-up pages of the Risk Assessment, direct response to Jacobs Engineering comments, and request for timely review of modifications

DOCUMENT NUMBER: 279
DOCUMENT DATE: 07/26/88
NUMBER OF PAGES: 002
AUTHOR: Chris Tanner, P.E.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Transmittal of draft "Work Plan for Phase 2 Stabilization Study"

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 280
DOCUMENT DATE: 07/26/88
NUMBER OF PAGES: 003
AUTHOR: Chris Tanner, P.E.
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Justification of Dike Borings at the Sheridan site, attached location map for dike samples

DOCUMENT NUMBER: 281
DOCUMENT DATE: 07/26/88
NUMBER OF PAGES: 001
AUTHOR: B.C. Robison, D.V.M., Ph.D., Project Toxicologist
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Rationale for the use of 4.34 as the carcinogenic potency factor

DOCUMENT NUMBER: 282
DOCUMENT DATE: 07/27/88
NUMBER OF PAGES: 002
AUTHOR: Robert T. Stewart
COMPANY/AGENCY: Jones, Day, Reavis & Pogue
RECIPIENT: Pamela Phillips, Assistant Regional Counsel
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Confirmation of agreement reached by EPA and the Sheridan Site Committee on 07/18/88 regarding PCB levels and a double liner/leachate collection system

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 283
DOCUMENT DATE: 07/27/88
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Memorandum and Attachment
DOCUMENT TITLE: Biotreatability Study Progress Meeting on 07/21/88 and attached list of attendees

DOCUMENT NUMBER: 284
DOCUMENT DATE: 08/03/88
NUMBER OF PAGES: 002
AUTHOR: Jerry Greenbaum, Review Team Project Manager
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Comments on the Liner Systems design section of the marked-up Sheridan Feasibility Study Report submitted to EPA on 07/25/88

DOCUMENT NUMBER: 285
DOCUMENT DATE: 08/04/88
NUMBER OF PAGES: 003
AUTHOR: Unspecified
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Sketches
DOCUMENT TITLE: Sketches from ERM-Southwest, Inc. of RCRA double liner system design

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 286
DOCUMENT DATE: 08/06/88
NUMBER OF PAGES: 003
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Sheridan Feasibility Study (FS) Conditional Approval; approval of FS pending revision of document to reflect changes transmitted by this letter

DOCUMENT NUMBER: 287
DOCUMENT DATE: 08/09/88
NUMBER OF PAGES: 002
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Submittal of EPA's formal comments on the revised Biological Treatability Study

DOCUMENT NUMBER: 288
DOCUMENT DATE: 08/09/88
NUMBER OF PAGES: 005
AUTHOR: Larry B. Feldcamp, Chairman, and Robert T. Stewart, Vice Chairman
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Robert E. Layton, Jr., P.E., Regional Administrator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Sheridan Superfund Site; proposal of the Sheridan Site Committee to undertake appropriate remedial action at the Sheridan site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 289
DOCUMENT DATE: 08/10/88
NUMBER OF PAGES: 031
AUTHOR: Michael L. Daggett, Chief, Organic Lab Section, Houston Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Dave Cook, U.S. EPA Region VI
DOCUMENT TYPE: CLP Data Review
DOCUMENT TITLE: Case No. 9935: Organic samples FH-907 and FH-908

DOCUMENT NUMBER: 290
DOCUMENT DATE: 08/15/88
NUMBER OF PAGES: 005
AUTHOR: Unspecified
COMPANY/AGENCY: Unspecified
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Comments
DOCUMENT TITLE: Ground Water Migration Management Remedial Investigation Review Comments

DOCUMENT NUMBER: 291
DOCUMENT DATE: 08/22/88
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Sheridan Risk Assessment; aknowledgement of incorporation of EPA requested revisions

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 292
DOCUMENT DATE: 08/24/88
NUMBER OF PAGES: 003
AUTHOR: Robert T. Stewart, Vice Chairman
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Larry D. Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Site Feasibility Study; respondents to Administrative Order invoke dispute resolution provisions

DOCUMENT NUMBER: 293
DOCUMENT DATE: 09/01/88
NUMBER OF PAGES: 002
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Sheridan Site Comments - Experimental Design of Phase III Biotreatment Study

DOCUMENT NUMBER: 294
DOCUMENT DATE: 09/05/88
NUMBER OF PAGES: 002
AUTHOR: Robert T. Stewart, Vice Chairman, Sheridan Site Committee
COMPANY/AGENCY: Jones, Day, Reavis & Pogue
RECIPIENT: Larry Wright, Chief, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Site Administrative Order on Consent; Doc. No. CERCLA VI-01087; requests EPA consider use of Alternative Dispute Resolution ("ADR") techniques

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 295
DOCUMENT DATE: 09/06/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attached Reports
DOCUMENT TITLE: Transmittal of the revised Interim Source Control Feasibility Study

DOCUMENT NUMBER: 296
DOCUMENT DATE: 09/06/88
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site File
DOCUMENT TYPE: Memorandum to File w/o Attachment
DOCUMENT TITLE: First Stabilization Studies Progress Meeting 08/31/88; purpose of meeting was to describe progress of the stabilization studies

DOCUMENT NUMBER: 297
DOCUMENT DATE: 09/07/88
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Biotreatment Progress meeting - 08/30/88; Summarization of the results of meeting to discuss progress of the Sheridan Biotreatment studies being conducted by the Radian lab

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 298
DOCUMENT DATE: 09/07/88
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John M. Cotterell, P.E., Project Manager, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Sheridan Work Plan for Stabilization Study; transmittal of EPA's comments; comments do not imply approval of the proposed studies

DOCUMENT NUMBER: 299
DOCUMENT DATE: 09/12/88
NUMBER OF PAGES: 001
AUTHOR: Bennett Stokes for Pamela Phillips, Senior Attorney
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert E. Layton, Jr., P.E., Regional Administrator, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Sheridan Site Committee; Sheridan Site Committee (SSC) has invoked the Dispute Resolution Provision of its Remedial Investigation/Feasibility Study Administrative Order

DOCUMENT NUMBER: 300
DOCUMENT DATE: 09/12/88
NUMBER OF PAGES: 002
AUTHOR: Pamela Phillips, Senior Attorney
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert Stewart, Vice Chairman, Sheridan Site Committee
DOCUMENT TYPE: Correspondence w/o referenced enclosure
DOCUMENT TITLE: Administrative Order CERCLA VI-01-87, Sheridan Dispute Resolution

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 301
DOCUMENT DATE: 09/13/88
NUMBER OF PAGES: 001
AUTHOR: Edwin F. Barth, Environmental Engineer, Stabilization Section, Risk Reduction Engineering Laboratory
COMPANY/AGENCY: U.S. EPA
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Long-Term Effectiveness of Solidification/Stabilization of Oily Waste

DOCUMENT NUMBER 302
DOCUMENT DATE: 09/21/88
NUMBER OF PAGES: 002
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert T. Stewart, Vice Chairman, Sheridan Site Committee and Pam Phillips, ORC, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Dispute Resolution Procedures for Sheridan Site Committee Conference

DOCUMENT NUMBER: 303
DOCUMENT DATE: 09/22/88
NUMBER OF PAGES: 005
AUTHOR: Chris Tanner
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Interim Source Control Feasibility Study Submittal; revised pages 4-1, 6-15, 6-17, and 6-34

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 304
DOCUMENT DATE: 09/23/88
NUMBER OF PAGES: 006
AUTHOR: Jerry Greenbaum, Senior Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Sheridan Disposal Site; Review of Interim Control Feasibility Study Dated 09/06/88

DOCUMENT NUMBER: 305
DOCUMENT DATE: 09/27/88
NUMBER OF PAGES: 002
AUTHOR: Chris Tanner
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Interim Source Control Feasibility Study Submittal; Second Revision of page 4-1

DOCUMENT NUMBER: 306
DOCUMENT DATE: 09/28/88
NUMBER OF PAGES: 012
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert Stewart, Vice Chairman, Sheridan Site Committee
DOCUMENT TYPE: Correspondence and Attachment
DOCUMENT TITLE: Dispute Resolution; enclosure is the factual explanation of EPA's position on the outstanding dispute

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 307
DOCUMENT DATE: 09/28/88
NUMBER OF PAGES: 011
AUTHOR: Robert T. Stewart
COMPANY/AGENCY: Jones, Day, Reavis & Pogue
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Transmittal of (1) Respondents' Statement Regarding Dispute Raised By 05/06/88 Letter of EPA, and (2) Attachment A - List of Respondents

DOCUMENT NUMBER: 308
DOCUMENT DATE: 10/03/88
NUMBER OF PAGES: 005
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group Inc.
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Sampling for Sheridan Phase III Biotreatment Study, Radian Corporation, Austin, Texas, 09/30/88

DOCUMENT NUMBER: 309
DOCUMENT DATE: 10/04/88
NUMBER OF PAGES: 002
AUTHOR: William A. Eckroade, Environmental Engineer, Office of Waste Programs Enforcement
COMPANY/AGENCY: U.S. EPA Headquarters
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Land Disposal Restrictions at Superfund Sites

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 068133147

DOCUMENT NUMBER: 310
DOCUMENT DATE: 10/04/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communications
DOCUMENT TITLE: Re: Conversation with Paul De Percin, ORD, concerning the Stabilization Study/Hazon site Demonstration Project

DOCUMENT NUMBER: 311
DOCUMENT DATE: 10/05/88
NUMBER OF PAGES: 098
AUTHOR: Robert Layton, Jr., Pamela Phillips, ORC, Ruth L. Izraeli, RPM, and Larry Wright, Chief
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Sheridan Site Committee and U.S. EPA Region VI Site Files
DOCUMENT TYPE: Transcript
DOCUMENT TITLE: The transcript from the meeting held between the Sheridan Site Committee, EPA's legal staff, and Enforcement staff to resolve the disagreement regarding the Consent Decree that was issued 02/03/87

DOCUMENT NUMBER: 312
DOCUMENT DATE: 10/10/88
NUMBER OF PAGES: 002
AUTHOR: Sheryl A. Quinn, Project Coordinator
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ellen Greeney, Community Relations Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Summary of community relations activities undertaken during 09/88 on behalf of the Sheridan Disposal Site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062138147

DOCUMENT NUMBER: 313
DOCUMENT DATE: 10/12/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Land Ban Work Group, U.S. EPA Region VI
DOCUMENT TYPE: [illegible]
DOCUMENT TITLE: Land Ban Applicability to Sheridan Site

DOCUMENT NUMBER: 314
DOCUMENT DATE: 10/13/88
NUMBER OF PAGES: 001
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert T. Stewart, Vice Chairman, Sheridan Site Committee and Pam Phillips, ORC, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Resolution of Dispute Under the Sheridan Administrative Order, Docket No. CERCLA VI-01-87

DOCUMENT NUMBER: 315
DOCUMENT DATE: 10/14/88
NUMBER OF PAGES: 075
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Sheridan Disposal Services Site Ground Water Migration Management Remedial Investigation pages that were revised, as indicated by RPM's comments

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 316
DOCUMENT DATE: 10/17/88
NUMBER OF PAGES: 001
AUTHOR: Dr. Davis L. Ford, John M. Cotterell, and Dr. Frank J. Castaldi
COMPANY/AGENCY: Sheridan Site Committee and Radian Corporation
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Change in approach to Reactor Sampling and Analysis

DOCUMENT NUMBER: 317
DOCUMENT DATE: 10/17/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Trip Report
DOCUMENT TITLE: Re: Discussion with Dr. Castaldi, of Radian Corporation concerning available data on the biotreatment bench-scale studies

DOCUMENT NUMBER: 318
DOCUMENT DATE: 10/19/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communication
DOCUMENT TITLE: Re: Discussion of the Sheridan Disposal Service site Risk Assessment Report, with Philip Crocker, of the Water Management Branch

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 319
DOCUMENT DATE: 10/19/88
NUMBER OF PAGES: 002
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group
RECIPIENT: Ruth L. Izraeli, Remedial Project Officer, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sampling for Sheridan Phase II Biotreatment Study, Radian Corporation, Austin, TX

DOCUMENT NUMBER: 320
DOCUMENT DATE: 10/26/88
NUMBER OF PAGES: 009
AUTHOR: Acting Regional Director, Region 2
COMPANY/AGENCY: U.S. Department of the Interior
RECIPIENT: Regional Environmental Officer, USDI, Southwest Region, Albuquerque, New Mexico
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Preliminary Natural Resources Survey of DOI Trust Responsibilities at the Sheridan Disposal Service Site, Waller County, TX

DOCUMENT NUMBER: 321
DOCUMENT DATE: 10/26/88
NUMBER OF PAGES: 003
AUTHOR: Fred A. Reitman, Toxicologist, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum and Attachment
DOCUMENT TITLE: Groundwater Risks for Sheridan Site Risk Assessment Appendix F

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 322
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 001
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Site Source Control Feasibility Study

DOCUMENT NUMBER: 323
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 112
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc. for the Sheridan Site Committee
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: The revised Source Control Feasibility Study for the Sheridan Disposal Service site - Vol. I

DOCUMENT NUMBER: 324
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 174
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc. for the Sheridan Site Committee
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: The Source Control Feasibility Study for the Sheridan Disposal Service site - Vol. II

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 325
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 001
AUTHOR: John Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Transmittal of eight copies of the Sheridan Site Risk Assessment

DOCUMENT NUMBER: 326
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 233
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc. for the Sheridan Site Committee
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: The Baseline Risk Assessment for the Sheridan Disposal Service Site in Waller County, TX - Vol. I

DOCUMENT NUMBER: 327
DOCUMENT DATE: 11/01/88
NUMBER OF PAGES: 328
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM Southwest, Inc. for the Sheridan Site Committee
RECIPIENT: U.S EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: The Baseline Risk Assessment for the Sheridan Disposal Services Site in Waller County, TX - Vol. II

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 328
DOCUMENT DATE: 11/02/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communication
DOCUMENT TITLE: Documentation of call from Paul de Percin, Chemical Engineer, ORD, to discuss Hazon Stabilization Study

DOCUMENT NUMBER: 329
DOCUMENT DATE: 11/07/88
NUMBER OF PAGES: 003
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Briefing Paper
DOCUMENT TITLE: Sheridan Disposal Services Proposed Plan Briefing Paper

DOCUMENT NUMBER: 330
DOCUMENT DATE: 11/07/88
NUMBER OF PAGES: 004
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Trip Report
DOCUMENT TITLE: Re: Trip to Texas Water Commission to discuss Sheridan proposed plan with TWC officials

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 331
DOCUMENT DATE: 11/14/88
NUMBER OF PAGES: 002
AUTHOR: Lou Barinka, Acting Chief, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Project Manager, Sheridan [illegible]
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Source Control Feasibility Study and Risk Assessment dated November 1, 1988

DOCUMENT NUMBER: 332
DOCUMENT DATE: 11/14/88
NUMBER OF PAGES: 013
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Attached summary paper on facilitated transport for the Sheridan Disposal Service site

DOCUMENT NUMBER: 333
DOCUMENT DATE: 11/15/88
NUMBER OF PAGES: 002
AUTHOR: Roger Meacham, Office of Public Awareness
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Residents of Hempstead, Waller County, TX
DOCUMENT TYPE: News Release
DOCUMENT TITLE: Discussion of the possible remedial alternatives that the U.S. EPA is considering for use, in cleaning up the hazardous waste contamination at the Sheridan Disposal Service site

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ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 334
DOCUMENT DATE: 11/16/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Record of Communication
DOCUMENT TITLE: Documentation of call with John Cotterell of the Sheridan Site Committee, to discuss dike soils requiring remediation

DOCUMENT NUMBER: 335
DOCUMENT DATE: 11/21/88
NUMBER OF PAGES: 001
AUTHOR: Walter J. Starbuck, III
COMPANY/AGENCY: Resident of Brookshire, TX
RECIPIENT: Ellen Greeney, Community Relations Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Public comment regarding the November 22 Hearing on the Sheridan Disposal Service site - Superfund

DOCUMENT NUMBER: 336
DOCUMENT DATE: 11/22/88
NUMBER OF PAGES: 003
AUTHOR: Dr. Robert E. Frulla, Senior Vice President
COMPANY/AGENCY: International Technology Corporation
RECIPIENT: Ellen D. Greeney, Community Relations Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: ITC's comments on the remedies that they can provide effectively for the Sheridan Disposal Service site

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FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 337
DOCUMENT DATE: 11/22/88
NUMBER OF PAGES: 008
AUTHOR: Ellen Greeney, Community Relations Coordinator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Residents of Hempstead, Waller County, TX
DOCUMENT TYPE: Project Update
DOCUMENT TITLE: Superfund Project Update for the Sheridan Disposal Service site Proposed Plan of Action

DOCUMENT NUMBER: 338
DOCUMENT DATE: 11/27/88
NUMBER OF PAGES: 001
AUTHOR: Richard A. Kemp, Editor, The Waller County News-Citizen
COMPANY/AGENCY: Great Northwest Publishing Company
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Mr. Kemp's comments regarding the Sheridan Disposal Service proposed plans to neutralize contaminants at the site

DOCUMENT NUMBER: 339
DOCUMENT DATE: 11/28/88
NUMBER OF PAGES: 001
AUTHOR: William A. Eckroade, Environmental Engineer, Office of Waste Programs Enforcement
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: RCRA LDR and ARAR at the Sheridan Disposal Service site, in Hempstead, TX

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 340
DOCUMENT DATE: 11/29/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: John Cotterell, Project Officer, Sheridan Site Committee
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan Disposal Service site Ground Water Migration Management Remedial Investigation Revised Pages

DOCUMENT NUMBER: 341
DOCUMENT DATE: 11/30/88
NUMBER OF PAGES: 003
AUTHOR: Rajagopal Krishnamoorthy, Ph.D., Environmental Engineer
COMPANY/AGENCY: Jacobs Engineering Group
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Sheridan site, WA No, 183, Phase III Biotreatability Study 90 Day Sampling Activity, November 29, 1988

DOCUMENT NUMBER: 342
DOCUMENT DATE: 12/01/88
NUMBER OF PAGES: 002
AUTHOR: Larry D. Wright, Acting Chief, Superfund Enforcement Branch
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: James O. Young, Acting Regional Director, Region 2, U.S. Department of the Interior
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Preliminary Natural Resources Survey of DOI Trust Responsibilities at the Sheridan Disposal Service site

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 343
DOCUMENT DATE: 12/06/88
NUMBER OF PAGES: 013
AUTHOR: Mike Mitchell, FIT Geologist
COMPANY/AGENCY: Ecology & Environment, Inc.
RECIPIENT: David Wineman, Regional Project Officer, Ecology & Environment, Inc.
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: October 4, 1988 Sampling Inspection, Sheridan Disposal Service Hempstead, TX

DOCUMENT NUMBER: 344
DOCUMENT DATE: 12/07/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Trip Report
DOCUMENT TITLE: Trip taken to discuss the latest results of the biotreatment bench-scale studies conducted on behalf of the Sheridan Disposal Service Committee

DOCUMENT NUMBER: 345
DOCUMENT DATE: 12/09/88
NUMBER OF PAGES: 001
AUTHOR: John Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Enclosure of two copies of the Phase 2 Stabilization Study

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 346
DOCUMENT DATE: 12/09/88
NUMBER OF PAGES: 283
AUTHOR: Se Ba Lee, Ph.D., Chris Tanner, Project Manager, and Douglas S. Diehl, President
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Report
DOCUMENT TITLE: The Phase II Stabilization Study Report for the Sheridan Disposal Service site

DOCUMENT NUMBER: 347
DOCUMENT DATE: 12/09/88
NUMBER OF PAGES: 002
AUTHOR: Donald W. Beaver, Senior Hydrologist
COMPANY/AGENCY: Jacobs Engineering Group
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Briefing Paper
DOCUMENT TITLE: Sheridan Disposal Service Proposed Plan Briefing Paper

DOCUMENT NUMBER: 348
DOCUMENT DATE: 12/13/88
NUMBER OF PAGES: 001
AUTHOR: Dave Wineman, FIT, Regional Project Officer, Hazardous Waste Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Brian Burgess, Acting Chief, Site Assessment Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Potential Hazardous Waste Site Sampling Inspection Report

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 349
DOCUMENT DATE: 12/14/88
NUMBER OF PAGES: 002
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA

DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Re: Comments submitted regarding Sheridan Disposal Service site by International Technology Corporation

DOCUMENT NUMBER: 350
DOCUMENT DATE: 12/14/88
NUMBER OF PAGES: 007
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ellen D. Greeney, Community Relations Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Sheridan Site Committee's comments on the alternatives for source control remediation of the Sheridan Disposal Service site

DOCUMENT NUMBER: 351
DOCUMENT DATE: 12/15/88
NUMBER OF PAGES: 160
AUTHOR: Lab Personnel
COMPANY/AGENCY: Lancaster Laboratories, Inc.
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Lab Data Report
DOCUMENT TITLE: Item 1: Final Leachate Ph - 1988 Qualification Manual

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 352
DOCUMENT DATE: 12/15/88
NUMBER OF PAGES: 013
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ellen D. Greeney, Community Relations Coordinator, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Re: Two stabilization articles referenced in Sheridan Site Committee Comments December 14, 1988 Letter

DOCUMENT NUMBER: 353
DOCUMENT DATE: 12/21/88
NUMBER OF PAGES: 098
AUTHOR: John M. Cotterell, P.E., Project Manager
COMPANY/AGENCY: Sheridan Site Committee
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Report
DOCUMENT TITLE: Chain-of-Custody documentation relating to Sheridan Disposal Service Site analyses

DOCUMENT NUMBER: 354
DOCUMENT DATE: 12/22/88
NUMBER OF PAGES: 028
AUTHOR: Allen J. Medine, Ph.D., Work Assignment Manager
COMPANY/AGENCY: Jacobs Engineering Group, Inc.
RECIPIENT: Ruth L Izraeli, Remedial Project Manager, Superfund Enforcement Branch, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence and Attachments
DOCUMENT TITLE: Final Review of the Phase II Stabilization Study

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 355
DOCUMENT DATE: 12/28/88
NUMBER OF PAGES: 001
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: [illegible]
DOCUMENT TITLE: Re: Meeting that was requested by Sheridan Site Committee to allow them to further discuss stabilization

DOCUMENT NUMBER: 356
DOCUMENT DATE: 12/29/88
NUMBER OF PAGES: 030
AUTHOR: Ruth L. Izraeli, Remedial Project Manager, Superfund Enforcement Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: ROD
DOCUMENT TITLE: The Record of Decision for the Sheridan Disposal Service Superfund site, in Hempstead, Waller County, TX, which discusses the remedial alternative (biotreatment) that EPA has selected

DOCUMENT NUMBER: 357
DOCUMENT DATE: Undated
NUMBER OF PAGES: 007
AUTHOR: Unspecified
COMPANY/AGENCY: Texas Water Commission
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Summary
DOCUMENT TITLE: Site Remedial Action report for Sheridan Disposal Service, Inc.; Solid Waste Registration No. 39007

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 358
DOCUMENT DATE: Undated
NUMBER OF PAGES: 002
AUTHOR: Robert E. Layton, Jr., P.E., Regional Administrator
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Robert T. Stewart, Vice Chairman, Sheridan Site Committee and Pamela Phillips, U.S. EPA Region VI
DOCUMENT TYPE: Correspondence
DOCUMENT TITLE: Dispute Resolution Procedures for Sheridan Site Committee Conference

DOCUMENT NUMBER: 359
DOCUMENT DATE: Undated
NUMBER OF PAGES: 026
AUTHOR: Staff Consultants
COMPANY/AGENCY: Hold That River, A Subsidiary of Gulf Applied Technologies
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: Brochure on Hold That River's Erosion Control Prevention & Protection Services

DOCUMENT NUMBER: 360
DOCUMENT DATE: Undated
NUMBER OF PAGES: 107
AUTHOR: Staff Consultants
COMPANY/AGENCY: ERM-Southwest, Inc.
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Report
DOCUMENT TITLE: The Draft Ground Water Migration Management Remedial Investigation Report for Sheridan Disposal Service dated 07/15/88

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: SHERIDAN DISPOSAL SERVICE
SITE NUMBER: TXD 062132147

DOCUMENT NUMBER: 361
DOCUMENT DATE: Undated
NUMBER OF PAGES: 004
AUTHOR: Tom Kearns, Environmental Quality Specialist
COMPANY/AGENCY: Texas Department of Water Resources
RECIPIENT: U.S. EPA Region VI Site Files
DOCUMENT TYPE: Preliminary Assessment
DOCUMENT TITLE: Potential Hazardous Waste Site Identification and Preliminary Assessment for Sheridan Disposal Service

DOCUMENT NUMBER: 362
DOCUMENT DATE: Undated
NUMBER OF PAGES: 002
AUTHOR: Fred Reitman, Toxicologist, Superfund Oklahoma/New Mexico Section
COMPANY/AGENCY: U.S. EPA Region VI
RECIPIENT: Ruth Izraeli, Remedial Project Manager, Superfund Enforcement Section, U.S. EPA Region VI
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Re: Bioavailability of PCB from Solid Matrix

APPENDIX C

Sheridan Disposal Services
Community Relations Responsiveness Summary

This Community Relations Responsiveness Summary has been prepared to provide written responses to comments submitted regarding the proposed plan of action at the Sheridan Superfund site. The summary is divided into two sections:

Section I: Background of Community Involvement and Concerns. This section provides a brief history of community interest and concerns raised during the remedial planning activities at the Sheridan site.

Section II: Summary of Major Comments Received. The comments are summarized and EPA's responses are provided.

I. Background of Community Involvement and Concerns

In general, there has been a long history of citizen awareness of the Sheridan Disposal site. There was a high level of concern in the early 1970's when incineration at the site resulted in air emissions that apparently disturbed people living within a 7-mile radius of the site. A citizens' group, the Committee for a Clean Waller County, submitted a petition of 500+ signatures to the Texas Water Quality Board in 1971 calling for closure of the Sheridan Disposal site.

However, public concern regarding the site waned in recent years, probably because the site has been inactive since 1984. Also, the site is relatively remote, away from any population centers as no residences are located within a mile of the site.

II. Summary of Major Comments Received

The press release and Proposed Plan fact sheet announcing the public comment period and public meeting were released on November 15, 1988. The comment period began on November 15, 1988, and ended on December 15, 1988. The public meeting was held with area residents and local officials on November 22, 1988, at the Waller County Courthouse. The purpose of this meeting was to explain the results of the Remedial Investigation and to outline the various alternatives presented in the Feasibility Study. About 40 citizens attended the meeting, and two people made oral statements or asked questions. Three letters containing written comments were received.

Overall, the residents and local officials do not oppose the proposed

plan. During the public comment period, there were comments and questions regarding the following:

Comment #1: What types of chemicals are being considered for stabilization?

EPA Response: The Sheridan Site Committee has conducted small-scale tests on a wide variety of lime and silicate-type materials. However, the specific material will be determined during the design phase.

Comment #2: Biotreatment has not been commercially applied on this scale and scope.

EPA Response: Biotreatment, such as activated sludge processes, have been used on a commercial scale to degrade organics in municipal and industrial effluent. Biotreatment has been successfully demonstrated in a field-scale application at the French Limited site in Crosby, Texas, which contains similar wastes to those at Sheridan.

Comment #3: The estimated cost for incineration is too high and the project can be completed in one year using a high throughput incinerator.

EPA Response: The conceptual design costs for incineration used in the Feasibility Study are within the required range for estimated accuracy (+50 percent to -30 percent) and the calculated cost per cubic yard is actually low when compared to the range of costs discussed in the 1986-1987 survey of selected firms in the commercial hazardous waste industry, prepared by the ICF corporation in 1988.

The design concepts and costs developed in the Feasibility Study may be used to show that a one year incineration period, if mechanically and logistically feasible, would actually cost more than the 2.7 year period used in the incineration alternative.

Comment #4: The incinerator ash can be safely disposed of on site without special precautions.

EPA Response: In order to be safely disposed of on-site, it was assumed in the FS that the ash would have to meet the substantive requirements of RCRA Delisting which is a very time-consuming and eventually costly process. It was determined that off-site disposal would be less expensive and more efficient than disposing of the waste on site and satisfying Delisting requirements.

Comment #5: The hazards of the site are exaggerated and far too much money is being spent on the site.

EPA Response: We do not believe the hazards have been exaggerated. Unacceptable long-term risks are associated with the chemicals that are present at the site. These chemicals are slowly moving downward toward the ground water and outward toward the Brazos River. Exposure to these chemicals could increase the likelihood of contracting cancer or cause other harmful effects.

We disagree that the costs are excessive because Superfund requires that the selected remedy be cost-effective. That is, when comparing alternatives which achieve equal protection of human health and the environment, the least expensive alternative should be selected.

Comment #6 : A more suitable remedy would be to fill in the area and provide funds to the county to monitor the site.

EPA Response: EPA is mandated to provide long-term protection of public health, welfare and the environment and reduce waste toxicity, mobility and volume whenever possible. Merely, filling in the area does not adequately accomplish these statuatorily required goals.

Comment #7: Stabilization should be the preferred remedy for the Sheridan site because it is fully protective of human health and the environment, and has demonstrated advantages over other alternatives in terms of short-term effectiveness, implementability and cost.

EPA Response: In order to satisfy the requirements of section 121 of the Superfund Amendments and Reauthorization Act, EPA has determined that remedial alternatives must be evaluated using nine criteria for comparison, including Overall Protection of Human Health and the Environment. When evaluating the alternatives in terms of their overall protectiveness, EPA determined that Stabilization is protective of human health and the environment, but that it is not as protective in the long-term as other alternatives, such as Biotreatment, which will destroy essentially all mobile organic contaminants in the waste.

Biotreatment is the least expensive alternative which will significantly reduce waste mobility, toxicity and volume and essentially eliminate the source of contaminants to ground water. Unlike Stabilization, Biotreatment will result in the destruction of all mobile organic compounds which could migrate into the environment if the stabilization or containment system were to fail.

EPA agrees with the Commenter that Stabilization is readily implementable and that its short-term costs are lower than those of Biotreatment. However, EPA is required to consider potential replacement costs of the remedy, should it fail, in addition to capital and operational costs. The replacement costs for Stabilization are estimated to be considerably greater than those for Biotreatment. Further, the potential for remedy failure is greater for Stabilization since, as is described in Section 4.3 of this Record of Decision, it received a lower rating for Long-term Permanence and Effectiveness than Biotreatment. Finally, cost is only a primary consideration when comparing equally protective alternatives which is not true of Biotreatment and Stabilization.

EPA disagrees that Stabilization has demonstrated advantages over Biotreatment in terms of Short-term Effectiveness. Although Stabilization may be accomplished somewhat more quickly, it will release greater volatile organic emissions than Biotreatment, and those emissions will not be controlled. Whereas, Biotreatment will be conducted in a closed system with emissions controls.

Of the remaining six criteria for alternative evaluation, Biotreatment received a superior rating to Stabilization in all six comparisons.

Comment No. 8

Stabilization studies have been conducted which demonstrate that there are at least two commercially available stabilization technologies that will effectively immobilize contaminants in the Sheridan site waste and be protective of human health and the environment.

EPA Response: The results of the site-specific stabilization studies do not demonstrate that all contaminants are effectively immobilized. The studies show that the stabilization process still allows migration of select contaminants, particularly benzene. In addition, the studies did not attempt to further evaluate the long-term stability and protectiveness of the stabilization by conducting other tests such as sequential leaching, freeze-thaw and wet-dry tests. However, no conclusive data is currently available on the long-term effectiveness of stabilizing high organic wastes such as those at Sheridan and validated test methods to address long-term effectiveness have not been fully developed. A technical evaluation of the Phase 2 Stabilization Study submitted by the commenter for EPA consideration, is included in the site Administrative Record.

Comment No. 9: Recent studies on similiar wastes to those at Sheridan demonstrate that the Stabilization alternative would be protective of human health and the environment.

EPA Response: The two references (Evans and Pancoski were authors in each of the papers) cited in suppport of this comment do not demostrate that stabilization will be protective of human health and the environment at the Sheridan site. In the paper by Evans, LaGrega, Pancoski and Raymond (1988), it should be noted that the wastes were not similar to those at Sheridan and did not contain significant levels of volatile organics. In contrast, the Sheridan waste contains well over a thousand times greater concentrations of volatiles such as benzene, toluene and ethyl benzene than the wastes used in the study.

Regardless of the differences in waste type, the referenced stabilization study has several potential problems with high organic content of the leachate and overall strength. Organics in the study were leached from the stabilized mass as indicated by organic levels in the leachate which exceeded 200 mg/l. However, these organics could not be quantified in the study since the largest organic fraction was found in an area of unresolved peaks in the GC/MS analysis. Further, approximately 90 percent of the compressive strengths tested in the study were less than 40 psi. Therefore, the stabilized wastes would not meet recommended criteria (Cullinane et al., 1986/EPA/540/2-86/001, pers. comm. of Allan Medine, Jacobs Engineering with C. Wiles, EPA, Cincinnati).

ERM-Southwest, inc.

HOUSTON, TEXAS

DRILLING LOG

Project: Monitor Well Installation
Owner: Sheridan
Location: Hemostead, TX
V.O. NO.: 091-06
Boring/Well No.: MW-40
Boring T.D.: 85.5 '
Boring Diam.: 11 "
Surface Elevation: 168.58'
Water Depth: Initial: ---
24 Hrs.: ---
Screen Dia.: 4 "
Length: 17.5'/2.5' SUMP
Slot Size: 0.01 "
Casing Dia.: 4 "
Length: 65.5 '
Type: SCH 40 PVC
Drilling Company: Southwestern Labs
Drilling Method: Hollow Stem Auger
Driller: B. Christopher
Log By: D. Waldemann/S. Ritter
Date Drilled: 10/10/87

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	WELL CONSTRUCTION	SAMPLE TYPE	COHESIVE STRENGTH (tons/sq.ft.) or Penetration Test (Blows per 6")	SAMPLE INTERVAL (FEET)	DESCRIPTION INTERVAL (FEET)	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURE)
0					0-4	0-2	SILTY CLAY: Dark brown to blackish, dry, crumbly, rootlets, nodules (5YR 3/2).
				>4.5		2-5	SLIGHTLY SILTY CLAY: Dark reddish brown, dry, stiff, few nodules, rootlets, slickensides, lighter color from 4-5'.
					4-9		
5				>4.5		5-7	CLAY: Dark reddish brown to black, dry, very stiff, calcium carbonate nodules (5YR 2.5/1).
						7-8	SILTY CLAY: Dry, crumbly, calcium carbonate crystals, some slickensides.
				>4.5		8-9	CLAY: Dark reddish brown to black, dry, very stiff, calcium carbonate nodules (5YR 2.5/1).
				4.25	9-14	9-24	SLIGHTLY SILTY CLAY: Dark reddish brown, dry, stiff, abundant calcium carbonate and iron nodules, abundant slickensides throughout at 45-60 degrees from core axis (5YR 3/2 to 3/4).
10				4.5			
				>4.5	14-19		
15							
				3.5	19-24		From 19-24' becomes reddish brown, dry, stiff, few nodules and slickensides, black organic blebs throughout, few gray silty areas (5YR 4/4).
20							
					24-29	24-30.5	SILTY CLAY: Reddish brown, softer, no slickensides, iron nodules and organic blebs throughout, abundant calcium
25							

ERM-Southwest, inc.

HOUSTON, TEXAS

DRILLING LOG

Project: Monitor Well Installation
Owner: Sheridan
Location: Hempstead, TX
V.O. NO.: 091-06
Boring/Well No.: MW-40
Boring T.D.: 65.5 '
Boring Diam.: 11 "
Surface Elevation: 168.58'
Water Depth: Initial --- 24 Hrs. ---
Screen Dia.: 4 "
Length: 17.5'/2.5' SUMP
Slot Size: 0.01 "
Casing Dia.: 4 "
Length: 65.5 '
Type: SCH 40 PVC
Drilling Company: Southwestern Labs
Drilling Method: Hollow Stem Auger
Driller: B. Christocher
Log By: D. Weidemann/S. Ritter
Date Drilled: 10/10/87

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	WELL CONSTRUCTION	SAMPLE TYPE	COHESIVE STRENGTH (tons/sq.ft.) & Penetration Test (Blows per 6")	SAMPLE INTERVAL (FEET)	DESCRIPTION INTERVAL (FEET)	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURE)
25							carbonate nodules at 27.5', trace very fine sand (5YR 4/4 to 3/4).
				3.25			
				3.25	29-34		
30				3.25		30.5-35.5	SANDY CLAY: Dark brown to brown, very fine-grained, dry, stiff, becomes sandier and softer with depth, increasing moisture content with depth, calcium carbonate nodules at 33' (10YR 4/3 to 3/3 and 5YR 3/4).
				3.25			
				2.25	34-38		
35						35.5-38	CLAYEY SILTY SAND: Dark brown to yellowish brown, damp, soft, vertical burrow filled with gray clay (7.5YR 4/6 to 10YR 5/4).
					39-44	39-53	SILTY SAND: Yellowish brown, fine to medium-grained, subrounded quartz, few pebbles, wet to saturated, liquifies when disturbed (10YR 5/4). Coarsens to more medium grained with depth.
40							
					44-49		
45							
					49-52		
50							

RESOURCE ENGINEERING
SUBSURFACE EXPLORATION

Sheet 1 of

LITHOLOGIC LOG AND CONSTRUCTI[illegible] OF MW-20

Client
Project Name: Sheridan Disposal Site
Project Location: Waller County, Texas
Job No.: 288-04 Boring No.: MW-20
Logged By: G. Grosse
Approved By:
Drilled By: J. Turner

DRILLING AND SAMPLING INFORMATION
Date Started: 11/14/89 Date Completed: 11/18
Method: HSA Total Depth: [illegible]

WELL COMPLETION INFORMATION
Screen Dia.: 4 inches Length: [illegible]
Slot Size: 0.01 inches Type: PVC
Casing Dia.: 4 inch Length: 85'

Depth in Feet	Description	Stratum Elevation in Feet	Sample No.	Sample Type	Blows per 6 inches	Graph Log	Qu or Penetrometer
	SURFACE ELEVATION						
0	SILTY CLAY, chocolate brown, iron streaked, roots and shells present.		01	ST	21		1.
			02	ST	29		1.
5			03	ST	38		
	CLAY, reddish brown, iron streaked with calcareous nodules, firm, stiff.		04	ST	50		>4.
	SANDY SILTY CLAY, reddish brown, calcareous nodules.		05	ST	25		>4
10			06	ST	50		
	- Grades into silty sand, tan, very fine grained. Silty clay lense at 14.5 feet, 8 inches thick. Grades into a silty clay.		07	ST	58		
15			08	ST	67		
			09	ST	83		3
	SILTY CLAY, brown with grey mottling, iron streaked.		10	ST	33		4
20			11	ST	34		
			12	ST	42		
	SILTY SAND, reddish tan, fine grained, loose.		13	ST	62		
25	- Sandy silt lense at 26 feet.		14	ST	50		
	- Frequent fingers of silt and clay.		15	ST	62		
	- Silty clay lense at 29 feet, 3 inches thick.		16	SS	58		
30	- Grey sand partings 30 to 32 feet.		17	SS	88		
			18	SS	50		
35	- Sandy, clayey silt, dark grey at 36 to 37 feet		19	SS	N/A		
	- Grades into sand, brown, medium to coarse grained.		20	SS	21		
40			21	SS	25		38/ for
			22	SS	33		12/ for
	- Very fine grained sand, white-grey at 43 to 44 feet.		23	SS	29		18/ for
45	- Clay inclusions at 46 feet.		24	SS	21		
			25	SS	33		
50	Gravel mixed with sand, from 50 to 54 feet. Gravel pink to white, rounded, 1/4 inch to 1 inch diameter.		26	SS	N/A		22 for
			27	SS	33		9 for
55	CLAY, olive green with grey mottling.		28	ST	38		
			29	ST / SS	17 / 8		
58							
	CONTINUED ON SHEET 2						

SAMPLER TYPE
SS - DRIVEN SPLIT SPOON CA - CONTINUOUS FLIGHT AUGER
ST - PRESSED SHELBY TUBE RC - ROCK CORE

BORING METHOD
HSA - HOLLOW STEM AUGERS DC - DRIVING CASING
CFA - CONTINUOUS FLIGHT AUGERS MD - MUD DRILLING

RESOURCE ENGINEERING
SUBSURFACE EXPLORATION

Sheet 2 of 2

LITHOLOGIC LOG AND CONSTRUCTIO OF MW-20

Client
Project Name: Thorium Disposal Site
Project Location: Waller County, Texas
Job No.: 188-04 Boring No.: MW-20
Logged By: G. Greene
Approved By:
Drilled By: J. Turner

DRILLING AND SAMPLING INFORMATION
Date Started: 11/14/85 Date Completed: 11/18/8
Method: HA Total Depth: 100'

WELL COMPLETION INFORMATION
Screen Dia.: 4 inch Length: 12.5'
Slot Size: 0.01 inch Type: PVC sc
Casing Dia.: 4 inch Length: 55'

DEPTH IN FEET	DESCRIPTION	STRATUM ELEVATION IN FEET	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GRAPHIC LOG	POCKET PENETROMETER (TSF) OR FIELD COMMENTS
	SURFACE ELEVATION						
	CONTINUED FROM SHEET 1						
58	CLAY, olive green with grey mottling, very stiff and brittle.		30	ST	75		2.0
60	- Color change, grades to grey with olive green red mottling.		31	ST	58		>4.5
	- Fine grained sand present.		32	ST	67		>4.5
65			33	ST	54		>4.5
			34	ST	25		>4.5
	- Lenses from 67.5 to 70 feet, olive green with grey mottling		35	ST	42		>4.5
70	- Calcareous nodules present.		36	SS	25		11/1 for 2
	- Sand increasing with depth.		37	ST	75		>4.
75			38	ST	100		>4.
			39	ST	50		>4.
			40	ST	75		>4.
80	- Grades into a color change, grey with olive green mottling.		41	ST	50		>4.
			42	ST	50		>4.
85	SANDY CLAY, grey with olive green mottling.		43	ST	58		>4.
			44	ST	58		>4.
	SAND, greyish brown grading into a tan, medium to fine grained		45	SS	21		70/50 for 7
90	- Clayey sand lenses 93-94 feet.		46	SS	25		20/50 for
			47	SS	25		32/50 for
95	- Grades into a clayey sand, brown with grey mottling, sand partings.		48	SS	21		25/50 for
			49	SS	33		32/50 for
	CLAY, normal brown with grey mottling, some fine grained sand, iron streaked.		50	ST	62		>4
100	BORING TERMINATED AT 100'.						

WELL COMPLETION DETAILS

TD = 98'
Screen = 97.5' - 83.0'
Sand = 97.5' - 81'
Bentonite Seal = 81' - 73'
Grouted to surface.

SAMPLER TYPE
SS - DRIVEN SPLIT SPOON CA - CONTINUOUS FLIGHT AUGER
ST - PRESSED SHELBY TUBE RC - ROCK CORE

BORING METHOD
HSA - HOLLOW STEM AUGERS DC - DRIVING CASING
CFA - CONTINUOUS FLIGHT AUGERS MD - MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATIO RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: W-12
Job #: 288-01
Drawn By: JDA
Approved By: CHS

DRILLING AND SAMPLING INFORMATION

Date Started: 4/3/84
Date Completed: 4/3/84
Drill Foreman: Littell
Inspector: Brothers
Boring Method: HSA

Hammer Wt.: 140 lbs.
Hammer Drop: 30 in.
Spoon Sampler OD: 2 in.
Rock Core Dia.: N/A in.
Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION – 167.0)	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength, qu Tons/Ft.²	Permeability x 10⁻⁷ cm/sec.	Natural Dry Density lbs./cu. ft.	Water Content %	LL = Liquid Limit PL = Plastic Limit
CLAY, stiff to hard, gray to brown, iron oxide and calcareous nodules (CH)											
	5	1	ST				1.8				LL=7 PL=3 PI=4
(-)200 = 95.7%	10	2	ST				4.6				LL=7 PL=3 PI=4
	15										
	20	3	ST				3.8				LL=(PL=: PI=
	25										

Continued on Sheet 2

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT.
▼ AFTER 72 HRS. 26.0 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGE
DC – DRIVING CASING
MD – MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATION RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: W-12
Job #: 288-01
Drawn By: JDA
Approved By: CHP

DRILLING and SAMPLING INFORMATION

Date Started: 4/3/84 — Hammer Wt.: 140 lbs.
Date Completed: 4/3/84 — Hammer Drop: 30 in.
Drill Foreman: Littell — Spoon Sampler OD: 2 in.
Inspector: Brothers — Rock Core Dia.: N/A in.
Boring Method: HSA — Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION – 167.0)	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength, qu Tons/Ft.²	Permeability x 10⁻⁷ cm/sec	Natural Dry Density lbs./cu. ft.	Water Content %	LL = Liquid Limit PL = Plastic Limit SL = Shrinkage Limit
CLAY, stiff to hard, gray to brown, iron oxide and calcareous nodules (CH)											
	5	1	ST				1.8				LL=7 PL=31 PI=42
(-)200 = 95.7%	10	2	ST				4.6				LL=73 PL=32 PI=41
	15										
	20	3	ST				3.8				LL=6 PL=2 PI=3
	25										

Continued on Sheet 2

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT.
▼ AFTER 72 HRS. 26.0 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGER
DC – DRIVING CASING
MD – MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATIO RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: W-12
Job #: 288-01
Drawn By: JDA
Approved By: CDB

DRILLING and SAMPLING INFORMATION

Date Started: 4/3/84 — Hammer Wt.: 140 lbs.
Date Completed: 4/3/84 — Hammer Drop: 30 in.
Drill Foreman: Littell — Spoon Sampler OD: 2 in.
Inspector: Brothers — Rock Core Dia.: N/A in.
Boring Method: HSA — Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION – 167.0)	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength qu Tons/Ft.²	Pocket Penetrometer qu Tons/Ft.²	Permeability K x 10⁻⁷ cm/sec	Natural Dry Density lbs./cu. ft.	Water Content %	LL = Liquid Limit PL = Plastic Limit SL = Shrinkage Limit
CLAY, stiff, gray to brown, calcareous nodules becomes sandier at 29'												
(-)200 = 89.4% (CL)	30	4	ST				1.8					LL=47 PL=22 PI=25
GRAVEL, compact, tan	35											
(-)200 = 1.5%	40	5	SS			5						
Boring Terminated @ 40'												
Well screened 24' - 40'	45											
	50											

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT.
▼ AFTER 72 HRS. 26.0 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGI
DC – DRIVING CASING
MD – MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATION RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: W-10
Job #: 288-01
Drawn By: JDA
Approved By: CDO

DRILLING and SAMPLING INFORMATION

Date Started: 4/2/84
Date Completed: 4/2/84
Drill Foreman: Littell
Inspector: Brothers
Boring Method: HSA

Hammer Wt.: 140 lbs.
Hammer Drop: 30 in.
Spoon Sampler OD: 2 in.
Rock Core Dia.: N/A in.
Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION – 166.1)	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength qu Tons/Ft.²	Pocket Penetrometer qp Tons/Ft.²	Permeability x 10⁻⁷ cm/sec	Natural Dry Density lbs./cu. ft.	Water Content %	LL - Liquid Limit; PL - Plastic Limit; SL - Shrinkage Limit
CLAY, very stiff, brown	5	1	ST				4.5					
SILTY SAND, compact, reddish brown and tan, with layers of clay and sandy clay	10	2	ST				-					
(-) 200 = 34.7%	15	3	SS			11						
2" clay layer at 19' (-)200 = 90.3%	20	4	SS			11						
Sandy Clay Layer (-)200 = 57.9%	25	5	ST									

Continued on Sheet 2

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT.
▼ AFTER 72 HRS 29.85 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGERS
DC – DRIVING CASING
MD – MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATIO RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: W-10
Job #: 288-01
Drawn By: JDA
Approved By: CDT

DRILLING and SAMPLING INFORMATION

Date Started: 4/2/84 — Hammer Wt.: 140 lbs.
Date Completed: 4/2/84 — Hammer Drop: 30 in.
Drill Foreman: Littell — Spoon Sampler OD: 2 in.
Inspector: Brothers — Rock Core Dia.: N/A in.
Boring Method: HSA — Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION – 166.1)	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength q_u Tons/Ft.²	Partial Compressive Strength q_p Tons/Ft.²	Permeability x 10⁻⁴ cm/sec	Natural Dry Density lbs./cu. ft.	Water Content %	LL = Liquid Limit PL = Plastic Limit SL = Shrinkage Limit
SILTY SAND, compact reddish brown and tan												
	30	6	SS		▽	16						
(-)200 = 15.1%	35	7	SS			12						
	40											
(-)200 = 38.2%		8	SS			22						
Boring Terminated @ 44.5'	45											
Well screened at 28'- 43'	50											

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT.
▼ AFTER 72 HRS. 29.85 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGER
DC – DRIVING CASING
MD – MUD DRILLING

RESOURCE ENGINEERING
SUBSURFACE EXPLORATION

Sheet 1 of

LITHOLOGIC LOG AND CONSTRUCTI
OF BH-32

Client
Project Name Harrisburg Disposal Site
Project Location Waller County, Texas
Job No. 188-04 Boring No. BH-32
Logged By G. Greene
Approved By
Drilled By J. Turner

DRILLING AND SAMPLING INFORMATION
Date Started 11/11/85 Date Completed 11/13/
Method HS Total Depth 101'

WELL COMPLETION INFORMATION
Screen Dia. Length Not Completed
Slot Size Type Grouted in pu
Casing Dia. Length

Depth in Feet	DESCRIPTION	Stratum Elevation in Feet	Sample No.	Sampler Type	Blows	Graph. Log	Pen. Resist.
0	SURFACE ELEVATION						
	SILTY CLAY, dark brown with roots present. Black staining 0 to 4 feet. No order.		1	ST	42		4
			2	ST	42		> 4
5	- Silty clay lenses 4 to 5 feet with a trace of sand, brown.		3	ST	42		> 4
			4	ST	42		4
	SILTY SAND, some clay, brown with iron and calcareous nodules present. Interval firm at top, loose at bottom.		5	ST	50		
10	SILTY SANDY CLAY, dark brown with iron nodules, calcareous nodules absent.		6	ST	50		2
			7	ST	50		4
	CLAY, reddish brown with abundant iron and calcareous nodules.						
15	SANDY SILTY CLAY, reddish brown, some iron and calcareous nodules.		8	ST	50		4
			9	ST	50		3
			10	ST	50		2
20	SILTY CLAY, dark brown, iron streaked with large iron nodules, some calcareous nodules present.		11	ST	33		3
			12	ST	46		2
25	- Sandy silty clay lenses, 1 foot thick 27-28 and 29-30 feet.		13	ST	42		
			14	ST	50		3
			15	ST	62		3
30	- Grades into a color change at 32 feet, gray mottling with some fine grained sand present.		16	ST	62		3
			17	ST	58		3
35			18	ST	58		
			19	ST	54		
40	- Grades into sandy clay, reddish brown, fine grained sand iron and calcareous nodules present.		20	ST	50		
			21	ST	75		
	SILTY SAND, reddish brown, fine sand, loose. - 3 inch thick clay lense at 43, 43.5 and 45 feet.		22	ST	50		
45			23	ST	75		
	- No recovery.		24	ST	NR		
	- Silty sand, brown, medium grained.		25	SS	33		13/ for
50	SAND, brown, coarse grained, rounded. Gravel in seamed, white and pink, from 1/8 to 1/2 inch some 1 inch diameter.		26	SS	22		22/ for
	LOST CIRCULATION		27	SS	8		
55			28	SS	NA		30 for
			29	SS	38		14 for
58							

CONTINUED ON SHEET 2

SAMPLER TYPE
SS - DRIVEN SPLIT SPOON CA - CONTINUOUS FLIGHT AUGER
ST - PRESSED SHELBY TUBE RC - ROCK CORE

BORING METHOD
HSA - HOLLOW STEM AUGERS DC - DRIVING CASING
CFA - CONTINUOUS FLIGHT AUGERS MD - MUD DRILLING

RESOURCE ENGINEERING
SUBSURFACE EXPLORATION

Sheet 1 of 1

LITHOLOGIC LOG AND CONSTRUCTION OF BH-30

Client
Project Name: Sherman Disposal Site
Project Location: Waller County, Texas
Job No.: 188-04 Boring No.: BH-30
Logged By: G. Greene/J. Fulbeyer
Approved By:
Drilled By: J. Durney

DRILLING AND SAMPLING INFORMATION
Date Started: 11/7/85 Date Completed: 11/8/85
Method: MD Total Depth: 56 feet

WELL COMPLETION INFORMATION
Screen Dia.: Length: Not completed
Slot Size: Type: grouted to the surface
Casing Dia.: Length:

Depth in Feet	Description	Stratum Elevation in Feet	Sample No.	Sample Type	% Recovery	Graphic Log	Pocket Penetrometer Reading (Tons/Sq Foot)	Water Level
0	SURFACE ELEVATION							
	SILTY SANDY CLAY, dark brown.		1	ST	25		2.75	
			2	ST	79			
5	SILTY CLAY, dark brown with calcareous nodules throughout.		3	ST	46		2.4	
			4	ST	50		2.5	
			5	ST	42		3.0	
10	- Olive green mottling present.		6	ST	69		2.5	
	- 3 inch silty clay layer at 13 feet.		7	ST	83		2.5	
15	- Iron nodules present, black.		8	ST	83		3.4	
			9	ST	75			
20			10	ST	80		2.5	
			11	ST	50		3.1	
			12	ST	75		3.6	
25			13	ST	67			
	- Silt inclusions (pockets) at 25 and 29 feet.		14	ST	92		3.4	
			15	ST	67			
30	- Grades into silty sand, brown with iron and calcareous nodules present.		16	ST	86			
	- Very sandy silt, some clay, gray (6 inches).		17	ST	92		2.2	
35	SILTY SAND with some clay, brown, calcareous and iron nodules present. Gray clay pockets throughout.		18	ST	58			
			19	ST	67			
			20	ST	71			
40	SAND, tan to greyish tan loose, fine grained.		21	ST	33			
			22	ST	50			
45	- 5 inch silty sand, tannish grey at 44 feet		23	ST	42			
	- 3 inch silty clay seam at 46 feet.		24	ST	42			
	SAND AND SILTY CLAY LAYERS. Sand tan, loose clay brownish grey.		25	ST	42			
50			26	RS	29		35/50 for 4"	
	LOOSE SAND AND GRAVEL. 3 inch layer of gravel, 1/2 inch diameter. Layers of coarse sand mixed with 1 inch gravel, sub-rounded, pink to grey to black. 8 inch of coarse sand with a layer of gravel changing back into sand.		27	RS	29		28/50 for 4"	
55			28	RS	54		21/50 for 5"	
56								
	CONTINUED ON SHEET 2							

SAMPLER TYPE
SS - DRIVEN SPLIT SPOON CA - CONTINUOUS FLIGHT AUGER
ST - PRESSED SHELBY TUBE RC - ROCK CORE

BORING METHOD
HSA - HOLLOW STEM AUGERS DC - DRIVING CASING
CFA - CONTINUOUS FLIGHT AUGERS MD - MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORATI RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: 20
Job #: 288-02
Drawn By: JDA
Approved By:

DRILLING and SAMPLING INFORMATION

Date Started: 3/5/85
Date Completed: 3/5/85
Drill Foreman: Littel
Inspector: Brothers
Boring Method: CFA

Hammer Wt.: 140 lbs.
Hammer Drop: 30 in.
Beach Sampler OD: 2 in.
Rock Core Dia.: N/A in.
Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION (SURFACE ELEVATION = 167.0)	Sample No.	Sample Type	% Recovery	Ground Water	Standard Penetration Test N, Blows/Ft.	Unconfined Compressive Strength, qu Tons/Ft.²	Permeability x 10⁻⁹ cm/sec	Natural Dry Density lbs/cu. ft.	Water Content %	LL = Liquid Limit PL = Plastic Limit
CLAY, very stiff to hard, brown										
	1	ST				2.2				
Dark gray 5.5 - 9.0 ft. (-)200 = 97.9%	2	ST				3.5				LL= PL= PI=
	3	ST				4.5+	8.1	111	19.0	
(-)200 = 97.1%	4	ST				4.5+				LL= PL= PI=
	5	ST				3.7				
	6	ST				3.5				
	7	ST				3.2				LL= PL= PI=
BORING TERMINATED @ 15'										

Note: Boring backfill with a cement - bentonite grout.

SAMPLER TYPE
SS - DRIVEN SPLIT SPOON
ST - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

GROUND WATER DEPTH
▼ AT COMPLETION Dry FT.
▼ AFTER HRS. FT.
WATER ON RODS FT.

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AU
DC - DRIVING CASING
MD - MUD DRILLING

RESOURCE ENGINEERING INCORPORATED

SUBSURFACE EXPLORAT RECORD

Client: Baker & Botts
Architect Engineer:
Project Name: Sheridan Disposal Service
Project Location: Waller County, Texas

Boring #: 22
Job #: 288-02
Drawn By: JOA
Approved By:

DRILLING and SAMPLING INFORMATION

Date Started: 3/5/85 — Hammer Wt.: 140 lbs.
Date Completed: 3/6/85 — Hammer Drop: 30 in.
Drill Foreman: Littel — Spoon Sampler OD: 2 in.
Inspector: Brothers — Rock Core Dia.: N/A in.
Boring Method: CFA/RW — Shelby Tube OD: 3 in.

TEST DATA

SOIL CLASSIFICATION / SURFACE ELEVATION –	Sample Depth	DEPTH SCALE	SAMPLE NO.	SAMPLE TYPE	% RECOVERY	GROUND WATER	Standard Penetration Test N, Blows/ft.	Unconfined Compressive Strength, qu Tons/ft.² / Pocket Penetrometer qu Tons/ft.²	Permeability K 10⁻⁵ cm/sec	Natural Dry Density lbs/cu ft.	Water Content %	L.L. - Liquid Limit / P.L. - Plastic Limit
SAND, compact tan (SM)												
CLAY(CH), stiff, olive green (-)200 = 94.9%		55	12	ST								LL= PL= PI=
BORING TERMINATED @ 57'		60										

Note: a) Boring drilled dry to 20'.
b) Boring was converted to well W-19.
c) Screen set 31 - 56 ft.

SAMPLER TYPE
SS – DRIVEN SPLIT SPOON
ST – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
▽ AT COMPLETION FT
▽ AFTER 120 HRS. 27 FT.
WATER ON RODS FT.

BORING METHOD
HSA – HOLLOW STEM AUGERS
CFA – CONTINUOUS FLIGHT AUGI
DC – DRIVING CASING
MD – MUD DRILLING
RW – Rotary Wash

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APPENDICES

A	Remedial Concept Design
B	Quality Assurance Project Plan for Remedial Design
C	Waste Material Excavation Plan
D	Borrow Area Sampling and Analysis Plan
E	Spur Jetty System COE Permit
F	Air Quality Standards Correspondence

STATEMENT OF WORK
FOR
REMEDIAL DESIGN AND REMEDIAL ACTION
BIOLOGICAL TREATMENT ALTERNATIVE

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

1 - WORK PLAN SUMMARY

1.1 Scope and Background

The Sheridan Site Committee performed the Source Control Remedial Investigation and Feasibility Study for the Sheridan site under an agreed Administrative Order issued in February 1987. The Source Control Feasibility Study identified and evaluated a range of alternatives for remedial action at the site. Upon review of these alternatives, EPA selected the Biotreatment alternative as the remedial action for the site in a Record of Decision (ROD) issued December 29, 1988.

In addition to biotreatment of waste materials, the remedy specified in the ROD includes the implementation of the following actions:

- Install a RCRA-compliant cap over the entire pond and dike area.
- Install a flexible spur jetty river bank erosion control system in the Brazos River.
- Monitor ground water quality for a minimum of 30 years.
- Decontaminate, disassemble and properly dispose of all on-site tanks and processing equipment.
- Properly dispose of any drums encountered during remediation. Contents of intact drums will be treated on-site or disposed of off-site, depending on the nature of the material.
- Treat potentially contaminated stormwater and waste water streams resulting from the waste materials treatment to remove solids, metal, and organic constituents. The treated water will comply with all Federal/State standards for discharge into the Brazos River, as set forth in the ROD.

- Implement institutional controls to preclude use of contaminated ground water and ensure the long-term integrity of the cap.

This Statement of Work (SOW) provides a description of remedial action elements, predesign activities, the design tasks, and review schedule as well as the project deliverables to be submitted to the U.S. Environmental Protection Agency (EPA).

Settlors will implement the remedial action described in the Record of Decision (ROD) as more fully developed in this SOW. In determining what constitutes implementation, the more specific language of the SOW, where it exists, will control.

1.2 Objectives

The objectives of this Statement of Work are as follows:

1. Develop to the degree practical the concept design for each of the remedial action elements.

2. Define the scope of the predesign activities.

3. Define the scope of preliminary and final design tasks and the scope of submittals to the EPA.

4. Define performance criteria and measurement protocols to the degree practicable for waste material excavation verification, biotreatment residual solids, discharge to receiving water body, air emissions, and ground water monitoring.

1.3 Technical Approach

The Remedial Design described herein will be performed in the following four major work phases:

- Spur Jetty Activities
- Predesign Activities
- Preliminary Design
- Intermediate/Final Design

Spur jetty activities include installation of a permeable spur jetty erosion control system on the south bank of the Brazos River in the vicinity of the site. Predesign activities include a pilot-scale study of biotreatment of waste materials, stabilization of residual solids and determination of air emissions and biotreatment effluent characteristics. The pilot-scale study will confirm bench-scale performance criteria and

develop process and mechanical concept design features and criteria.

Preliminary design will develop major remedial action elements sufficiently for a 30 percent review by EPA:

- liner design system (if needed)
- biotreatment system
- stabilization procedures
- wastewater treatment system
- cap base and cover system
- stormwater run-on/run-off control facilities
- post-construction facilities
- biotreatment volatile emissions control system

Intermediate/final design will develop these remedial action elements for reviews at 60, 90 and 100 percent complete, and will result in the delivery of the plans and specifications.

2.1 General Approach

This Statement of Work (SOW) is an attachment to and part of a Consent Decree among the Settlors (as defined in the Consent Decree) and the EPA, and is based on the ROD and the Remedial Concept Design included with this SOW as Appendix A. The Remedial Design will be performed in three major work phases.

Predesign Activities will include the pilot-scale biotreatment and residual solids stabilization study, characterization of air emissions and biotreatment effluent, concept design of biotreatment facilities, and concept design of wastewater treatment facilities. Preliminary Design phase tasks will include:

- Topographical survey
- Geotechnical boring for borrow areas
- Preliminary design of major remedial action elements

The Intermediate/Final Design phase will include the tasks necessary to develop the preliminary design of remedial action elements into final engineering drawings and construction specifications.

2.2 Spur Jetty Activities

Spur jetty activities include installation of permeable spur jetty erosion control system on the south bank of the Brazos River in the vicinity of the site.

This erosion control system will be designed per the requirements contained in the U.S. Army Corp of Engineers Permit No. 17110(02) (Appendix E herein).

2.3 Pilot-Scale Remediation Study

The primary purpose of the pilot-scale biotreatment study is to obtain the necessary process data required to initiate design of the proposed facilities.

A draft Biotreatment Pilot Study Workplan (BPS Workplan) will be developed and will include the following:

- Detailed description of the work to be performed.
- Detailed schedule for implementation.
- Quality Assurance/Quality Control Plan (QA/QC Plan).

- Worker Health and Safety Plan.
- Spill/Release Contingency Plan.
- Community Relations Plan.

The Spill/Release Contingency Plan, the Quality Assurance/Quality Control Plan, the Worker Health and Safety Plan, and the Community Relations Plan will apply throughout the course of the entire Remedial Action and will be modified as necessary.

2.3.1 Biotreatment Study

A pilot-scale biotreatment study will be conducted to confirm bench-scale performance criteria from previous tests, to firmly establish the basic design criteria for full-scale biological remediation, and for the further development of the Spill/Release Contingency Plan and the Worker Health and Safety Plan. The test reactors will be constructed contiguous to the affected area and will be designed to ensure adequate oxygenation and mixing. The reaction sequence will be either batch or semi-continuous, depending on sludge conveyance logistics and other factors necessary to develop the biological sludge age necessary for optimal biochemical removal. The necessary accommodations for representative sampling, sample preservation, and analyses will be provided.

2.3.2 Air Emission Characterization

Data for design of a volatile emission control system will be collected during the pilot-scale remediation study. Four air samples would be obtained from each reactor over the first two weeks from each batch. The first air sample will be analyzed for HSL volatiles and semivolatiles. The final three air samples will be analyzed for indicator parameters. Tentative indicator parameters are as follows:

Benzene
2,4-Dimethylphenol
Ethylbenzene
Naphthalene
Phenol
Tetrachloroethylene
Toluene
Trichloroethylene

2.3.3 Biotreatment Effluent Characterization

Data for design of a wastewater treatment system will be collected during the pilot-scale remediation study. Four water samples will be taken from the settled effluent from different biotreatment batches at a point where biotreatment is believed to be complete. To the degree practicable, these samples will include decontamination water and affected stormwater. Samples will be collected and analyzed for HSL volatiles and semivolatiles, total PCBs, metals, BOD, COD (or TOC), TSS, pH, oil and grease. Necessary process control information will also be collected to aid in wastewater treatment design. A similar suite of indicator parameters, as determined for air emission characterization, for organic chemicals may include the following:

Benzene
2,4-Dimethylphenol
Ethylbenzene
Naphthalene
Total PCBs
Phenol
Tetrachloroethylene
Toluene
Trichloroethylene

Results of this characterization should determine the indicator parameters which would be subjected to effluent criteria.

2.3.4 Ground Water Monitoring

During the pilot scale biotreatment study, monitoring of the shallow ground water downgradient of the pond will be carried out. The purpose of this monitoring program is to determine if the biotreatment activities cause the release of constituents to ground water below the site.

Five existing downgradient shallow alluvium monitor wells will be sampled prior to the start of, midway through, and following the completion of the pilot study. In addition, monitor well MW-12 will also be sampled as a background upgradient well. At every sampling event, water levels will be measured at all monitor wells.

The constituents in the ground water to be analyzed are the priority pollutant volatile organic compounds, pH and specific conductance. The priority pollutant volatile organic compounds (VOCs) would most readily be detected in the ground water downgradient of the main pond, in the unlikely event that the biotreatment pilot study activities release constituents into

the ground water. This group of constituents was chosen because compounds in this class: 1) are found in the source area (sludges in [illegible]), 2) are relatively soluble in water and therefore may migrate with ground water, and 3) certain VOCs have previously been detected in the shallow ground water zone north of the site (at MW-34 and MW-37).

If a significant increase in VOC is noted in any of the monitoring wells from the previous sampling event, the wells will be resampled within two weeks of receipt of laboratory data and analyzed for the full analytical suite HSL volatiles/semi-volatiles, metals and total PCBs.

The same standard sampling and analytical procedures used during the Ground Water Remedial Investigation will be followed for ground water sampling events during the biotreatment pilot scale study.

2.3.5 Stabilization Testing

Alternative technologies will be tested for the stabilization of biotreatment residual solids. Relative unconfined compressive strength, leachability and volume increase will be measured.

2.4 Biotreatment Concept Design

The concept design will be based upon the ROD, Appendix A and the results of the pilot-scale biotreatment study.

2.5 Wastewater Treatment Concept Design

The wastewater treatment Concept Design will be based on meeting discharge limits in Appendix A and on pollutant loadings derived from 1) residual effluent strength estimates from the biotreatment pilot-scale study, and 2) affected stormwater run-off rates and strength. Sources of wastewater include pond water, biotreatment effluent, affected stormwater, decontamination water and biotreatment residual dewatering liquids. This concept design will identify at least the following design basis conclusions:

- Selection of equalization/storage volume.
- Selection of treatment processes.
- Identification of flood protection needs, if any.
- Strategy for disposal of residual solids.

2.6 Design Planning and Scheduling

Within 30 days of the meeting called for in Section VIII.D.3 of the Work to be Performed section of the Consent Decree, the Settlors shall submit to EPA the following:

- A detailed schedule for Remedial Design.
- A description of how the design will meet the ARARs set forth in the ROD that are specific to this remedial action.
- A schedule for the submittal of any modifications to the QA/QC Plan and/or Worker Health and Safety Plan.

2.7 Preliminary Design

The preliminary design phase of the project will include the tasks necessary to define the major features of the proposed remediation design, including post-construction facilities. This will allow for regulatory review of an integrated preliminary design package (30 percent design review) before detailed design is initiated. Activities in this phase will include: topographic and geotechnical surveys; design calculations and analyses; definition of additional design criteria; sizing of components; and selection of construction techniques and materials. Descriptions of task activities to be performed during this phase are provided in the following sections.

A Quality Assurance Project Plan for this phase of work is included in this Statement of Work (Appendix B).

2.7.1 Task 1 - Materials Handling

Concepts relating to the handling of waste materials, the handling and placement of biotreatment residual solids, and the excavation, handling and placement of borrow soils will be developed. This Statement of Work defines the limits of excavation of waste materials (Appendix C), including an excavation verification sampling and analysis protocol.

2.7.2 Task 2 - Topographical Survey

A survey of the project site will be conducted by a land surveyor to supplement existing aerial topography of the site. This ground survey is necessary in order to perform the following project activities:

- Establish horizontal and vertical controls for site remedial action elements and documentation of completed work.

- Design of cap.

- Design of site drainage facilities as well as run-on and run-off controls.

- Monitor cap integrity.

Permanent survey monuments will be constructed at the site in the approximate locations shown on Figure 2-1. Horizontal control between monuments will be accurate to within 0.01 feet, and the monuments will be tied into the Texas Grid Coordinate system. Elevations for all monuments will be determined relative to a previous aerial survey base map and relative to each other to an accuracy of 0.01 feet, and the monuments will be tied into the USC and GS 1983 North American datum.

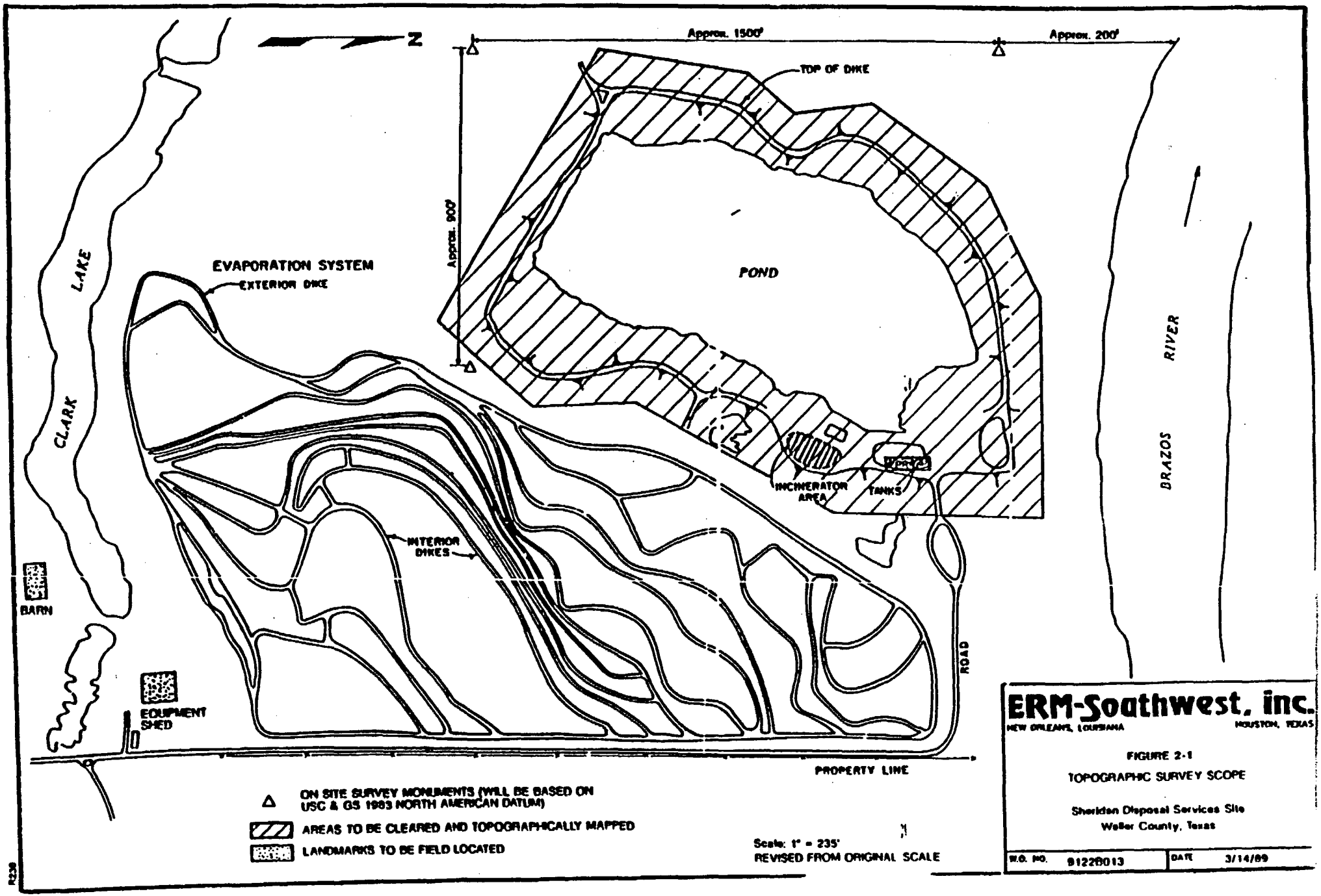
Prior to initiating the topographical survey work the site area will be cleared (bushhogged) in the areas designated in Figure 2-1 for topographic survey work.

Selected stationary landmarks (see Figure 2-1) which are visible on existing aerial photographs will be located to an accuracy of 5.0 feet horizontally relative to the survey monuments.

2.7.3 Task 3 - Geotechnical Boring Program For Borrow Areas

A series of shallow borings (25 feet deep) will be performed throughout a broad area of the site that is expected to contain suitable borrow for liner, cap base and final cover construction. Once a candidate borrow area has been identified from these borings and geotechnical tests, additional borings and a set of chemical analyses and geotechnical tests will be performed to confirm the suitability of soils to be excavated for use as liner, fill, cap and topsoil material. Also the geotechnical properties of clay will be characterized for future construction quality control parameters (e.g. compacted density and permeability). The plan for the location of the borrow pit is provided in Appendix D.

The final selected borrow pit location will be based on geotechnical analysis, proximity to construction areas, accessibility, and minimization of interference with ongoing agricultural activity.


N
Approx. 1500'
Approx. 200'
Approx. 900'
TOP OF DIKE
POND
EVAPORATION SYSTEM
EXTERIOR DIKE
CLARK LAKE
BRAZOS RIVER
INCINERATOR AREA
TANKS
INTERIOR DIKES
BARN
EQUIPMENT SHED
ROAD
PROPERTY LINE
ON SITE SURVEY MONUMENTS (WILL BE BASED ON USC & GS 1983 NORTH AMERICAN DATUM)
AREAS TO BE CLEARED AND TOPOGRAPHICALLY MAPPED
LANDMARKS TO BE FIELD LOCATED
Scale: 1" = 235'
REVISED FROM ORIGINAL SCALE
ERM-Southwest, inc.
NEW ORLEANS, LOUISIANA
HOUSTON, TEXAS
FIGURE 2-1
TOPOGRAPHIC SURVEY SCOPE
Sheridan Disposal Services Site
Weller County, Texas
W.O. NO. 91226013
DATE 3/14/89

A final grading plan will be developed to show how drainage will be managed once use of the area(s) ends.

2.7.4 Task 4 - Evaluation of Electric Service

During the production of the Feasibility Study it was determined that present electric service at the site is inadequate and costs were based on on-site generation. Present electrical service to the site by San Bernard Electric Cooperative, Inc. is a low-voltage single-phase service sufficient only for small motors and lighting. Sufficient power to drive aerators and other heavy motors will have to be generated on-site or three-phase service extended approximately five miles.

This task will estimate construction-phase and post-construction electric power needs to determine whether electric service to the site needs to be upgraded. Electric service may be upgraded in lieu of on-site generation during construction-phase, and electric service may need to be upgraded for post-construction maintenance. Cost estimates will be prepared for on-site versus off-site electrical service and a decision will be made based on economics during this step.

2.7.5 Task 5 - Stabilization Procedures

Stabilization procedures will be developed from information gained from Feasibility Study stabilization bench-scale studies, the pilot-scale biotreatment study and relevant literature. A stabilization technology will be selected for cost-effectively enhancing the unconfined compressive strength of the biotreatment residual solids. Step-wise procedures for stabilization of these materials will be developed and expressed as a schematic flow diagram for inclusion in the construction plans. Mixing procedures will be developed from prior construction experience of remediation contractors and QA/QC testing to ensure a homogenous blend. The volume increase due to stabilization will be estimated. The rationale for selection of the technology and specification of stabilization process will be summarized.

2.7.6 Task 6 - Liner Design

Preliminary design of the liner to contain stabilized biotreatment residual solids containing greater than 50 ppm PCBs will be developed in accordance with design concepts presented in Appendix A. Particular attention will be paid to the constructability and construction sequencing aspects of the design. The design will involve analyses of the following components and features:

- Determination of the volume of residual solids after biotreatment and stabilization.

- Preliminary layout.

- Preliminary development of grading plans for the liner base, consistent with the Appendix C Excavation Plan.

- Preliminary confirmation of materials and design features for the final cover.

The liner design will control potential leachate migration with a flexible membrane liner (FML) and with low-permeability clay. A liner compatibility test (SW-846 Method 9090) will assure that the FML is compatible with waste materials. A Construction Quality Assurance Plan will be developed to confirm that all elements of the liner are constructed in a manner consistent with engineering plans and specifications. The effectiveness of FML seaming will be confirmed by destructive testing. The effectiveness of placement and compaction of low-permeability clay will be confirmed by moisture and density measurements. The recompacted clay liner will have a permeability of less than 10^{-7} cm/sec as measured by laboratory falling head permeability tests at conditions which will be proposed for inclusion in the construction specifications (Remedial Design).

2.7.7 Task 7 - Biotreatment Design

The waste materials biotreatment facilities design will include the following:

- Development of a site plan.

- Development of hydraulic profile for the proposed facilities.

- Development of a process and instrumentation diagram for the proposed facilities.

- Development, based on the ROD, Appendix A and the results of the BPS, of biotreatment residual solids, wastewater and air emissions sampling and analysis plans.

2.7.8 Task 8 - Wastewater Treatment Design

The wastewater treatment facilities design will include the following:

- Analysis of wastewater to be treated.
- Volume and variability of flow.
- Performance criteria in Appendix A.
- Preparation of mass balance.
- Equipment specifications and layout.
- Detailed arrangement of process area.
- Residuals management
- Development of hydraulic profile for the proposed facilities.
- Development of a process and instrumentation diagram for the proposed facilities.

2.7.9 Task 9 - Run-on/Run-off Facilities Design

The remediation design will include stormwater run-on/run-off management features for both construction and post-construction phases of the project. The objective of construction phase stormwater management will be to isolate run-off from construction areas for appropriate management and prevention of construction area run-on. Post-construction stormwater management will provide the necessary design features for adequate cap drainage by existing drainage pathways.

Run-on/run-off management criteria as specifically contained in 40 CFR 264.301 will be used for storm events and for other hydrologic considerations. A standard of 10-year return frequency will be used for construction. Appropriate documentation of the selected rainfall criteria will be provided.

Construction Phase Stormwater

Construction area boundaries for run-on/run-off segregation will be established to determine drainage areas and required drainage flow patterns. Site topography data from the existing site base map will be utilized for this activity. Post-construction facilities will be based on the preliminary cap design.

Peak stormwater run-on/run-off rates to be used in design of drainage channels will be calculated from the Rational Formula. Rainfall intensity for this formula will be determined from HYDRO-35 and/or TP-40 assuming a peak rainfall return frequency of ten years. Time-of-concentration for selection of appropriate rainfall intensity, and run-off coefficients, will be based on standard engineering references. Required drainage channel dimensions and slope will be determined from the Manning equation.

This task will result in preliminary design layouts and sizing of all major drainage facilities and appurtenances, with supporting calculations.

2.7.10 Task 10 - Cap Base and Final Cover System

Preliminary design of the base and final cover of the proposed cap will involve design analyses of the following system components and features:

- Slope stability and foundation strength analysis of the dike.
- Integration of the liner design (Task 6), if necessary, into a working design layout of the cap base systems. This will involve preliminary selection of materials and equipment for the leachate collection manholes, gas vents, and related components.
- Formulation of construction and operation procedures and sampling protocol for the leachate collection system, if necessary.
- Preliminary development of grading plans for the cap base and final cover that are consistent with stormwater management systems formulated under Task 11.
- Preliminary confirmation of materials and design features for the final cover system.

Design layouts, proposed construction and operation features, and any supporting calculations from this Task will be provided in the 30 percent design review package.

2.7.11 Task 11 - Post-Construction Facilities

Preliminary design of post-construction facilities will involve selection of location and relative position of service roads, fences, monitor wells, signs, electrical services and final cap drainage channels. Preliminary plan-view layouts of these

facilities and typical design features for major components will be provided in the 30 percent design review package.

These facility layouts will be coordinated with the development of remedial design for ground water migration management.

2.7.12 Task 22 - 30-Percent Design Package and Review

A 30 percent design package will be prepared during the preliminary design phase for EPA review, and will include the following:

- Summary and interpretation of data collected from the Predesign Activities.
- Additional design criteria and design sketches or drawings for major elements of the remediation design.
- Design analyses (calculations, assumptions and design studies) supporting the recommended design and operation concepts.

Copies of this design package will be distributed to EPA regulatory review personnel in order to initiate the review cycle outlined below:

Review Step	Activity
1	One day working review meeting of Settlors and regulatory personnel. Comments provided by EPA where possible.
2	Thirty day review period.
3	One day meetings of Settlors and regulatory personnel to review EPA comments.
4	Incorporate agreed design revisions in design tasks into 60 percent review package.

At the conclusion of this review cycle a firm basis for initiation of the detailed design phase of the project will be established.

2.8 Final Design

The final design phase of the project will include all tasks necessary to produce a construction bid package for the remediation design and post-construction facilities. Activities in

this phase will include detailed design analyses and preparation of design drawings and construction specifications. Final design activities will include adding to or revising of preliminary calculations as necessary to assure that there continues to be a complete analytical basis for important engineering decisions. Three design reviews will be scheduled to monitor the direction and progress of design activities. Task descriptions for final design are provided in the following section.

2.8.1 Task 1 - Engineering Drawings

The engineering drawings (with the possible exception of electrical drawings) will be prepared with a Computer Aided Drawing (CAD) system and pen-plotted on standard full-size 22 inch wide x 34 inch long vellum paper. Standard Leroy-scale lettering will be used for drawing text. Proposed drawing standards for letter size, line width and pen size are presented in Figure 2-2. (This figure is typical only, and does not represent any specific Sheridan site design.) Plan drawings (e.g., drainage, final grading) may either be manually drawn or CAD plotted on screen mylar sepia paper containing the topographical backdrop of the plan view area.

It is anticipated that all major features of the design drawings (with the exception of electrical drawings) will be completed in time for the 60 percent design review (Task 3). After this review the drawings will be finalized in subsequent revisions through the 100 percent design review stage.

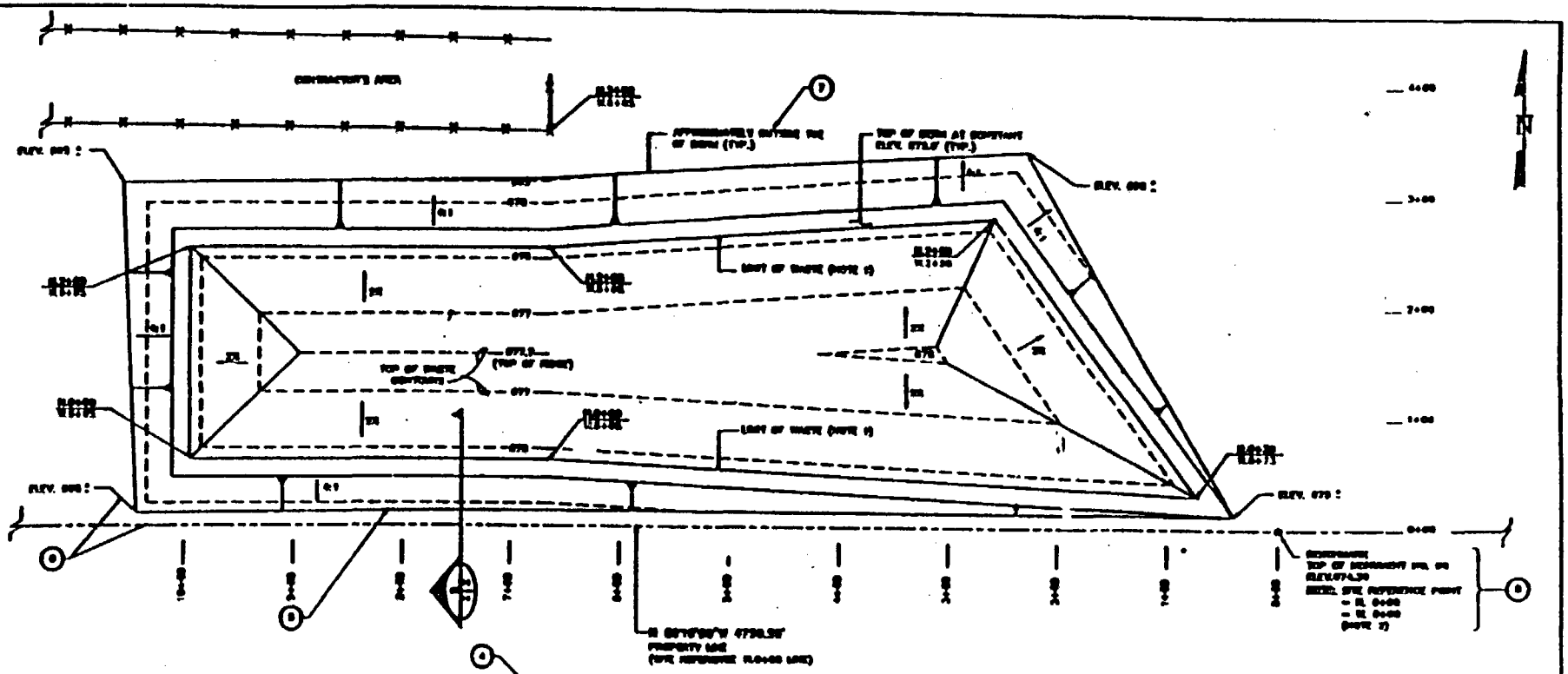
The quality of these drawings will be assured by review and checking procedures defined in the Appendix B, Quality Assurance Project Plan for Remedial Design.

2.8.2 Task 2 - Construction Specifications

Construction specifications required for this project will be developed in parallel with the construction design drawings and the CQA Plan. Standard Construction Specification Institute (CSI) format will be followed in preparing the specifications.

It is anticipated that construction specifications for major facilities will be available for the 60 percent design review (Task 3). A complete set of specifications for the project will be available for the 90 percent design review (Task 4).

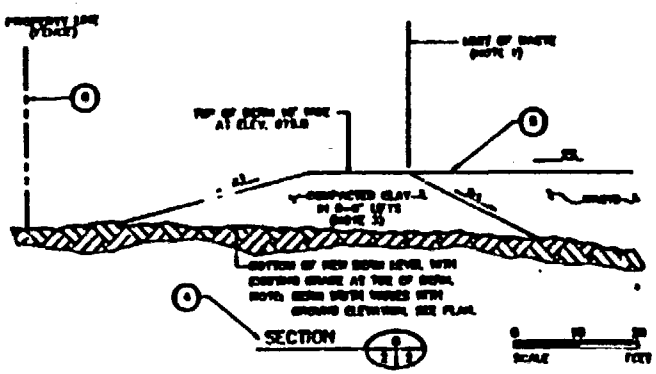
The quality of these specifications will be assured by review and checking procedures defined in the Appendix B, Quality Assurance Project Plan for Remedial Design.

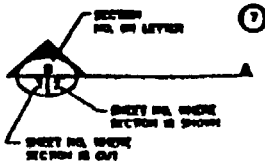


DRAWING STANDARDS LEGEND
22"x34" SHEET SIZE

ITEM NO.	ITEM	TEXT SIZE (HGT.)	FOR TEXT SIZE
1	SHEET TITLE	3/16"	.70
2	TITLE BLOCK NOTES	3/32"	.35
3	REVISION BLOCK NOTES	3/32"	.35
4	PLAN & SECTION TITLES	3/16"	.35
5	PLAN & SECTION FEATURES	—	.35/.70
6	DIMENSION & COTHER LINES	1/8"	.35
7	STANDARD NOTES & LABELS	1/8"	.35
8	DIMENSIONS, DESCRIPTIONS & NOTES	1/8"	.70

(AS TEXT SIZE AND FOR WITH PROVIDES MODULE SCAT A LINE ON HALF-SIZE DIMENSION (11"x17") OF 22"x34" SHEET.





NOTES:

1. EXISTING WASTE MATERIAL LOCATED OUTSIDE LIMIT OF WASTE TO BE RELOCATED WITHIN.
2. BENCHMARK PLAN = SITE REFERENCE POINT 0+00, 10+00, EXISTING PROPERTY LINE (N89°58'58"W – 10+00 REFERENCE LINE)
3. BERMS TO BE CONSTRUCTED OF CLAY, AS APPROVED BY OWNER.
4. DIMENSIONS AND ELEVATIONS ARE APPROXIMATE AND SUBJECT TO MINOR MODIFICATIONS.

50 0 50 100
SCALE FEET

4	DRAFT FOR REVIEW		
3			
2			
1			
REV.	DESCRIPTION	DATE	APPR.

ERM-Southwest, Inc.

FIGURE 2-2
ENGINEERING DESIGN
DRAWING STANDARD

DRAWN: DATE: 3/10/87 SHEET NO. 2 of 4

R230

2.8.3 Task 3 - 60-Percent Design Package and Review

A 60 percent design package will be prepared and submitted to EPA for review, and will include the following.

- Preliminary drawings for all major elements of the remediation design and post-construction facilities (with possible exception of electrical drawings).
- Construction specifications for major facilities components.
- Proposed survey monument locations.
- Design analyses for major system elements including any revisions to analyses submitted at the 30 percent Preliminary Design Review.

Copies of this review package will be distributed to the regulatory review personnel in order to initiate the review cycle outlined below:

Review Step	Activity
1	One to two day working review meeting of Settlors' and regulatory personnel. Comments will be provided where possible by EPA.
2	45-day regulatory review period.
3	One day meetings of Settlors and regulatory personnel to review EPA comments.
4	Incorporation of agreed changes in succeeding design work that will be submitted at the 90 percent design review.

At the conclusion of this review cycle, agreement will be reached on the major construction and operation features of the remediation design facilities.

2.8.4 Task 4 - 90-Percent Design Package and Review

At the 90 percent completion point of the project, a design package will be submitted to EPA for review, and will include the following:

- Complete project construction design package including drawings and specifications for all facilities.

- All design analyses.
- Draft construction schedule.

Copies of these review packages will be distributed to regulatory review personnel in order to initiate the review cycle outlined below. The purpose of the 90 percent review cycle will be to identify any minor revisions necessary before issuance of the final construction design.

Review Step	Activity
1	One to two day meeting of Settlors' and regulatory personnel to review major features of the design review package.
2	45-day regulatory review of review package.
3	One to two day meetings of Settlors' personnel and regulatory personnel to review EPA comments.
4	Incorporation of changes in succeeding design work that will be submitted at the 100 percent design review.

2.8.5 Task 5 - 100-Percent Design Package and Review

The 100 percent design package and review cycle will involve submittal for final EPA approval of all project documents which will include:

- Final project design package including drawings and specifications for all project facilities.
- Final design calculations and analyses.
- Final construction schedule.

Review Step	Activity
1	One to two day meeting of Settlors' and regulatory review personnel to discuss major features of the review package. The regulatory personnel will receive the review package at least two days prior to the meeting.
2	30-day period of regulatory review.

3 One to two day meetings of Settlors' and regulatory review personnel to discuss and resolve regulatory agency concerns and questions regarding the review package.

4 Twenty days for regulatory agency written transmittal of unresolved issues or questions to Settlors.

5 Twenty days for written response by Settlors to agency's concerns and questions on the final design.

Following EPA approval of the completed design, implementation of the remedial action will begin. At least 120 days prior to anticipated completion of the Site Remediation phase of remedial action, Settlors shall submit to EPA a draft Demobilization Plan. At least 90 days prior to anticipated completion of the Site Remediation Phase, Settlors shall submit to EPA a draft Monitoring, Operation and Maintenance ("MOM") Plan. The Demobilization Plan will identify those tasks to be performed relative to demobilization from site remediation, and will include a schedule for performing those tasks. The MOM Plan will describe the long-term maintenance (see Appendix A) and will include a schedule for performing those activities.

3.1 Reporting Requirements

Settlors' Project Manager will communicate with the EPA Principal Project Coordinator (PPC) during the course of the project to discuss technical issues and schedules. In addition, Settlors' Project Manager will submit monthly written progress reports to the PPC in accordance with the Consent Decree.

3.2 Meetings

Scheduled meetings with EPA during the execution of the Design phase of this project will begin with 30 percent design review meetings to discuss and resolve the technical design prior to the intermediate/final design phase. Review meetings continue at the 60, 90 and 100 percent project completion stages to discuss in detail the progress of intermediate/final design activities. Status meetings may be scheduled more frequently as necessary. These scheduled review meetings will include:

- 30 Percent Design Review Meetings--A review cycle at the conclusion of preliminary design activities will involve a meeting at the beginning and end of the cycle (see Section 2.3.11). The purpose of these meetings will be to review all major design analyses, concepts and criteria before detailed design activities are initiated.

- 60 Percent and 90 Percent Design Review Meetings--A review cycle at the 60 percent and 90 percent project design completion stages will require a meeting at the beginning and end of each cycle. An outline of materials to be reviewed at these meetings is provided in Section 2.4. The objective of these meetings will be to monitor final design progress and resolve detailed design issues.

- 100 Percent Design Review Meeting--A review cycle at the 100 percent project design completion stage will require a meeting at the beginning and end of the cycle. The objective of these meetings will be to approve the final design.

3.3 Schedule and Milestones

3.3.1 Schedule

All work performed by the Settlors shall be performed by qualified contractors in accordance with the schedule specified below. (Except where noted otherwise, all dates referred to in this Statement of Work or any attachments to the Statement of Work are calendar days; however, should a deadline fall on a weekend or a holiday, the deadline should be construed to continue to the next business day.)

A. Biotreatment Pilot Study.

1. Within fifteen (15) days of the effective date of this Decree Settlors shall supply EPA with a list of contractors under consideration for the Biotreatment Pilot Study. Within fifteen (15) days of EPA's receipt of this list, EPA shall notify the Settlors of any disapproved contractor. Within thirty (30) days of EPA's response, Settlors shall notify EPA of the contractor(s) selected to conduct the Biotreatment Pilot Study.

2. Within fifteen (15) days of receipt of the Settlors' notice, the parties' Project Coordinators and the contractor(s) shall meet to discuss development of the Biotreatment Pilot Study Workplan.

3. Within sixty (60) days of such meeting, the Settlors shall submit to EPA a draft Biotreatment Pilot Study Workplan ("BPS Workplan"). The draft BPS Workplan shall include: 1) a detailed description of the work to be performed; 2) a detailed schedule for implementation of the Biotreatment Pilot Study phase, including submission of the Biotreatment Pilot Study Report; 3) a Quality Assurance/Quality Control Plan (QA/QC Plan); 4) a Health and Safety Plan; 5) a Spill/Release Contingency Plan; and 6) a Community Relations Plan. The Spill/Release Contingency Plan, and the Community Relations Plan (items 5, and 6 above) shall apply throughout the course of the entire Remedial Action, unless otherwise amended pursuant to the terms of the Decree.

4. Within sixty (60) days of receipt of the draft BPS Workplan, EPA will provide comments to the Settlors.

5. Within thirty (30) days of receipt of EPA's comments on the draft BPS Workplan, the Settlors shall submit to EPA a final BPS Workplan which addresses EPA's comments.

6. Within thirty (30) days of receipt of the final BPS Workplan, EPA will notify the Settlors of its approval or disapproval with comments.

7. If the final BPS Workplan is disapproved, the Settlors shall address each comment and resubmit the final BPS Workplan within twenty (20) days of receipt of EPA's disapproval.

8. Within twenty (20) days of receipt of the resubmitted final BPS Workplan, EPA will approve or disapprove the BPS Workplan.

9. Within ten (10) days of receipt of EPA's approval of the BPS Workplan, Settlors shall initiate the Biotreatment Pilot Study ("Pilot Study") in accordance with the approved BPS Workplan.

10. During the Pilot Study, meetings shall be held at least bi-monthly (every two months) between the project Coordinators to discuss the status of the Pilot Study. At least seven (7) days prior to each bimonthly meeting, Settlors' Project Coordinator shall provide EPA's Project Coordinator with an agenda and any documents or data to be discussed at the meeting.

11. Settlors shall notify EPA upon completion of the Pilot Study.

12. Settlors shall submit to EPA a draft Biotreatment Pilot Study Report ("BPS Report") in accordance with the schedule in the BPS Workplan.

13. Within thirty (30) days after receipt of the draft BPS Report, EPA will provide comments to the Settlors.

14. Within thirty (30) days of receipt of EPA's comments on the draft BPS Report, the Settlors shall submit to EPA a final BPS Report which addresses EPA's comments.

15. Within thirty (30) days of receipt of the final BPS Report, EPA will notify the Settlors of its approval or disapproval with comments.

16. If the final BPS Report is disapproved, the Settlors shall address each comment and resubmit the final BPS Report within twenty (20) days of receipt of EPA's disapproval.

17. Within twenty (20) days of receipt of the resubmitted final BPS Report, EPA will approve or disapprove the BPS Report.

18. If the results of the BPS indicate that biological treatment will not achieve the objectives of the Remedial Action, Settlors shall submit a report recommending further action and/or investigation. If, based upon EPA's review of the report, further action or investigation is required, the Settlors shall initiate such additional action or investigation in accordance with an approved schedule.

B. Remedial Design.

1. Within twenty (20) days of receipt of EPA's approval of the BPS Report, in accordance with Section VIII.C.(3) above, Settlors shall provide EPA with a list of potential Remedial Design ("RD") contractors. Within twenty (20) days of receipt of such list, EPA shall notify Settlors of any disapproved contractor.

2. Within thirty (30) days of receipt of EPA's response, Settlors shall notify EPA of the selected contractor(s).

3. Within twenty (20) days of receipt of the notice of contractor selection, a meeting shall be held between the Project Coordinators and the contractor(s) to discuss:

1) design objectives and deliverables:
2) a detailed schedule for the Remedial Design and all remaining phases of the Remedial Action; and
3) a schedule for the submittal of any necessary modifications to the QA/QC Plan and/or Health and Safety Plan.

4. Within thirty (30) days of the meeting in B.3 above, items B.3(2) and (3) will be submitted. Within 30 days after submittal, EPA will notify Settlors of their approval or disapproval.

5. During the RD, meetings shall be held at least bi-monthly (every two months) between the Project Coordinators to discuss the status of the RD. At least seven (7) days prior to each bi-monthly meeting, Settlors' Project Coordinator shall provide EPA's Project Coordinator with an agenda and any documents or data to be discussed at the meeting.

6. Settlors shall submit to EPA the draft RD upon completion of 30%, 60%, 90% and 100% of the design. EPA will review each partial RD submission in accordance with the agreed upon schedule and provide comments to Settlors. Settlors shall incorporate revision to each partial RD, based on EPA's comments, in the next partial RD submission.

7. Within thirty (30) days of receipt of the 100%, i.e., final RD, EPA will notify Settlors of its approval or disapproval with comments.

8. If the final RD is disapproved, the Settlors shall address each comment and resubmit the final RD within twenty (20) days of receipt of EPA's disapproval.

9. Within twenty (20) days of receipt of the resubmittad final RD, EPA will approve of disapprove the RD.

C. Site Remediation.

1. Within thirty (30) days of receipt of EPA's approval of the RD, Settlors shall initiate the Site Remediation phase of the Remedial Action. The Site Remediation phase shall be conducted in accordance with the schedule in the approved RD.

2. Settlors shall notify EPA in writing upon completion of fifty percent (50%) Site Remediation and ninety percent (90%) Site Remediation.

3. At least ninety (90) days prior to the anticipated completion of the Site Remediation phase, the Settlors shall notify EPA in writing.

4. Within twenty (20) days after the EPA receives that notification, the Settlors and EPA shall meet to discuss the steps necessary to complete the Site Remediation phase. At least seven (7) days prior to this meeting, Settlors shall provide EPA with a list of activities that must be conducted to complete Site Remediation.

5. Within twenty (20) days after the meeting, EPA will provide the Settlors with a written notice describing any necessary action or items required for completion of the Site Remediation.

6. Upon completion of the Site Remediation, including necessary action or items required by EPA pursuant to paragraph 5 above, the Settlors shall submit written notice to EPA indicating that the Site Remediation has been completed.

7. Within forty-five (45) days of EPA's receipt of the written notice of completion, EPA will inspect the Site to determine that the Site Remediation phase has been completed.

D. Demobilization.

1. At least 120 days prior to anticipated completion of the Site Remediation phase, Settlors shall submit to EPA a draft Demobilization Plan.

2. Within thirty (30) days of receipt of the draft Demobilization Plan, EPA will provide comments to the Settlors.

3. Within thirty (30) days of receipt of EPA's comments of the draft Demobilization Plan, the Settlors shall submit to EPA a final Demobilization Plan which addresses EPA's comments.

4. Within thirty (30) days of receipt of the final Demobilization Plan, EPA will notify the Settlors of its approval or disapproval with comments.

5. If the final Demobilization Plan is disapproved, the Settlors shall address each comment and resubmit the final Demobilization Plan within twenty (20) days of receipt of EPA's disapproval.

6. Within twenty (20) days of receipt of the resubmitted final Demobilization Plan, EPA will approve of disapprove the resubmitted Plan.

7. Settlors shall initiate and carry out Demobilization in accordance with the approved Demobilization Plan. Settlors shall notify EPA upon completion of the Demobilization.

E. Site Remediation Report.

1. Within 120 days after completion of Demobilization, the Settlors shall submit to EPA a draft Site Remediation Report.

2. Within 120 days of receipt of the draft Site Remediation Report, EPA will provide comments to Settlors.

3. Within sixty (60) days of receipt of EPA's comments, Settlors shall submit a final Site Remediation Report which addresses each comment.

4. Within sixty (60) days of receipt of the final Site Remediation Report, EPA will approve of disapprove with comments.

5. If the final Site Remediation Report is disapproved, Settlors shall address EPA's comments and resubmit the final Site Remediation Report within thirty (30) days of receipt of disapproval.

6. Within thirty (30) days of receipt of the resubmitted final Site Remediation Report, EPA will approve of disapprove.

7. Within one hundred twenty (120) days after approval of the Site Remediation Report, EPA will issue its Certification of Completion for those phases preceding the Monitoring, Operation and Maintenance phase.

F. Monitoring, Operation and Maintenance.

1. At least ninety (90) days prior to anticipated completion of the Site Remediation Phase, Settlors shall submit to EPA a draft Monitoring, Operation and Maintenance ("MOM") Plan.

2. Within forty-five (45) days of receipt of the MOM Plan EPA will provide comments to Settlors.

3. Within thirty (30) days of receipt of EPA's comments, Settlors shall submit a final MOM Plan which addresses each comment.

4. Within thirty (30) days of receipt of the final MOM Plan, EPA will notify Settlors of its approval/disapproval with comments.

5. Within twenty (20) days of receipt of any disapproval, Settlors shall resubmit the final MOM Plan addressing each comment.

6. Within twenty (20) days of receipt of the resubmitted final MOM Plan, EPA will notify the Settlors of its approval/disapproval.

7. The Settlors shall initiate the Monitoring, Operation and Maintenance Phase in accordance with the schedule included in the approved MOM Plan.

8. In accordance with 42 U.S.C. Section 9621(c), Settlors shall perform a review of the Remedial Action every five years. A report shall be submitted to EPA on each fifth year anniversary of the Certification of Completion of Remedial Action pursuant to the Decree.

3.3.2 Milestones

The following will be considered project milestones:

1. Initiation of Pilot Scale Biotreatment Study
2. Completion of Pilot Scale Biotreatment Study
3. Initiation of Remedial Design

4. Completion of 30% of Remedial Design
5. Completion of 60% of Remedial Design
6. Completion of 90% of Remedial Design
7. Completion of 100% of Remedial Design
8. Initiation of Remedial Action
9. Completion of 50% of Remedial Action
10. Completion Remedial Action
11. Completion of Demobilization Phase
12. Completion of Site Remediation Report
13. Initiation of Monitoring, Operation and Maintenance Plan

The schedule for achievement of these milestones will be contained within the approved remedial design documents.

3.4 Project Management Plan

This Project Management Plan (PMP) provides a general description of the areas of responsibility for the remedial activities at the site. This Section is intended to be a reference aid and shall not alter in any manner the obligations, responsibilities, or duties of any party to this Consent Decree.

3.4.1 EPA

The EPA will review, inspect, oversee, and approve activities conducted at the site pursuant to this Statement of Work.

EPA Project Coordinator shall be the primary technical contact for EPA and shall have the responsibilities set forth in Section IX of the Consent Decree. These duties generally include overseeing the activities conducted at the Site.

EPA On-site Representative is the individual(s) assigned by EPA to observe on-site activities.

3.4.2 Sheridan Site Trust

The SST is the entity created by the Settlors to finance and implement the Remedial Action at the Site. The SST will act as the general contractor of the remedial activities at the site and may subcontract any or all phases of the Remedial Action. The CQA officer and inspection staff will be responsible to the SST and provide independent oversight and quality control over the construction contractors.

3.4.3 Design Engineer

The design engineer will prepare all designs and specifications including any revisions necessary to obtain EPA approval. The SST may request the design engineer to perform other activities.

3.4.4 Construction Contractors and Suppliers

Contractors and suppliers will perform construction services or provide equipment and materials in strict accordance with the plans and specifications. The construction contractors will use appropriate construction procedures and techniques to achieve the specified standards. The construction contractors have the authority and responsibility to direct and manage their employees and the equipment they use to accomplish the construction.

APPENDIX A

REMEDIAL CONCEPT DESIGN
BIOTREATMENT ALTERNATIVE

APPENDIX A

REMEDIAL CONCEPT DESIGN
BIOTREATMENT ALTERNATIVE

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

Prepared for:

The Sheridan Site Committee

August 8, 1989
W.O. #91-22

Prepared by:

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REMEDIAL CONCEPT DESIGN
BIOTREATMENT ALTERNATIVE

The following remedial action concept design for the Sheridan site is a refinement of the concepts and criteria used in the development of the selected alternative (Alternative D-Biotreatment) in the November 1, 1988 Source Control Feasibility Study (FS). Design concepts are presented for cap and liner systems as they were presented in the FS. Performance criteria are presented where feasible without detailed design concepts for biotreatment since scheduled pilot scale studies are projected to further refine design concepts. Performance criteria are also presented for wastewater treatment.

All actions will be taken in accordance with applicable or relevant and appropriate State and Federal requirements pursuant to Section 122(d) of CERCLA which are contained in the Record of Decision (ROD).

Remedial Action - General	Summarized in general terms as river bank erosion control, biotreatment of waste materials, stabilization of residual solids and placement within main pond, treatment and discharge of wastewater, construction of a liner as necessary and an engineered cap over main pond and dike, long term monitoring of effectiveness.
River Bank Erosion Control	Permeable spur jetty system redirects river currents away from the south bank of Brazos River. Prevents erosion of that bank and causes deposition of protective mass of waterborne material.
Biotreatment	Biological treatment of waste materials to be conducted in suspended growth completely mixed aerobic reactors. Promotes removal of contaminants in waste materials.
Stabilization	Increases the structural strength of the residual solids for handling, trafficability and structural support of the cap. Limits the solubility and mobility of any waste constituents.
Wastewater Treatment	Reduces constituents in effluent prior to discharge.
Cap	Encourages rainfall run-off and minimizes amount of percolating water able to contact remaining stabilized residual solids within main pond area. To be designed to meet RCRA requirements.

Long-Term Maintenance	The portion of the Remedial Action that occurs after completion of the Site Remediation Phase whose purpose is to assure effectiveness of the Remedial Action. The long-term maintenance is not intended to nor should it amend, modify or revise the Site Remediation.

Waste Materials	Sum of the following materials: 1. All material containing greater than 25 ppm of PCBs. This material includes the sludges contained in the pond and evaporation system; 2. Floating oil and emulsion in the pond and in on-site storage tanks; 3. Affected soil under pond. Affected soil under the pond is defined as soil that is intermixed with sludge or contains greater than 25 ppm of PCBs. The extent of affected soil under the pond will be determined during the remedial design/remedial action. 4. Dike surface soils. This material shall include: 1) oily soil on the inside dike slope between the current sludge level to the highest level the floating oil layer has contacted; 2) Grossly contaminated soil and sludge deposits visible on the dike. At a minimum, this shall include the soil and sludge in the vicinity of the treatment tanks and incinerator in the north-northeastern portions of the dike. 5. The wastes described in items 1-4 above address all wastes containing over 25 ppm of PCBs and/or high concentrations of other organics such as benzene and phenol, thus no action level for non-PCB organics is required. The delineation of materials requiring remediation is specified in the Waste Materials Excavation Plan.

Wastewater	Pond water, biotreatment effluent, affected stormwater, decontamination water and residual dewatering liquids from biotreatment.
Affected Stormwater	Stormwater falling within the main pond dikes other than that which falls in clean areas and is kept segregated from other stormwater.
Unaffected Stormwater	Stormwater not falling within diked perimeter of the main pond.
Pond Water	Water ponded within the main pond dike at the onset of remedial action.

Excavation and Handling	Excavation and handling of waste materials as necessary transfer to treatment facilities. Drums crushed. Debris and crushed drums stockpiled within main pond for later burial within main pond. Sampling and analysis to confirm removal of sludge materials.
Biotreatment	Biological treatment of waste materials for 30 days or for a different time period as necessary to achieve treatment of non-PCB target compound list (TCL) constituents to levels consistent with Radian Corp. Biodegradation Study results at 30 days. The TCL is defined in IFB W802081D1 Attachment A of USEPA Contract Laboratory Program Statement of Work for Organics Analysis Multi-Media Multi-Concentration 2/88. The Radian Corp. Biotreatment Study results are presented in the May 1989 "Laboratory Biodegradation Study of Waste Sludges from the Sheridan Site" report. Specific design and operating criteria are to be evaluated and resolved during the Biotreatment Pilot Study.
Biotreatment Residual Solids Handling	Drainage of free liquid from residual solids, stockpiling, testing of one sample per one hundred cubic yards of accumulated material, stabilization to three-day, 15 psi unconfined compressive strength, placement within main pond.

total PCBs ≤50 ppm, dry weight	Stabilization, then placement outside liner.
total PCBs >50 ppm, dry weight	Stabilization, then placement inside liner.
Air Emissions	Management of waste materials excavation, biotreatment and stabilization to minimize volatilization of compounds and maintain area air quality with regard to limits in Table 1 which are protective of off-site receptors. Sampling and analysis per Table 2 frequency. This sampling shall not limit any sampling and analysis necessary under the Health and Safety Plan or the Spill/Release Contingency Plan.
Volatile Emissions Control	Recovery of volatile emissions generated during biotreatment using a fume incinerator or equivalent system unless Biotreatment Pilot Study demonstrates that uncontrolled emissions do not exceed the Table 1 limits.
Measurement Compliance Point	Fenceline point in line with Mr. Sheridan's house at breathing height. If a residence is located closer than Mr. Sheridan's house, the fenceline point and Table 1 limits will be modified as necessary.
Wastewater Treatment	Treatment of wastewater to meet Table 3 limitations prior to discharge. Sampling and analysis per Table 4 frequency. Wastewater not exceeding Table 3 limits is subject to direct discharge.

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TABLE 1

Air Quality Standards

Parameters (a).	Limits at Measurement Compliance Point (e) .
units	ug/m3
Benzene	330
2,4-Dimethylphenol	
Ethylbenzene	22,000
Naphthalene	4,840
Phenol	1,650
Tetrachloroethylene	3,685
Toluene	41,250
Trichloroethylene	14,850
Metals and PCBs as dust:	
PCB	55(f)
Chromium	11
Lead	16.5
Nickel	1.65
Zinc	550(b)
	110(c)
	1100(d)

NOTES:

(a) These limits were selected for the indicator chemicals identified in the Risk Assessment as being representative of pond sludge characteristics. If characterization of the air emissions indicates the presence of other compounds of concern, standards will be developed for these compounds in a fashion similar to the original indicators.
(b) As zinc oxide fume.
(c) As zinc chloride fume.
(d) As zinc oxide dust.
(e) Limits 11 x ESL per Appendix F correspondence.
(f) Limit = 0.11 x TLV.

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TABLE 2

Sampling Frequency
Air Emissions Sampling and Analysis

Sampling Frequency	Sampling Period Starts	Sampling Period Ends	Sample Events in Period
Real time	Daily start of excavation	4 hours into excavation or end of excavation whichever is sooner	Continuous[a] or for 2 weeks, whichever is shorter
Weekly	Start of excavation of sludge materials.	End of excavation or biotreatment	Contingent on length of project.
Daily	Start of workday	End of workday	[b]

[a] Real time sampling will be correlated with excavation and treatment rates to establish operating guidelines.

[b] Daily HNU or OVA readings will be correlated with the weekly air emission analyses. The frequency and location of these readings will be specified in the site safety plan.

TABLE 3

Wastewater Effluent Discharge Limits

Parameter (a)	Limits (Monthly Avg.)
BOD_5	120 mg/l
TSS	100 mg/l
pH	6-9 Std.Units
O&G	20 mg/l
Benzene	0.086 mg/l
2,4-Dimethylphenol	0.029 mg/l
Ethylbenzene	0.21 mg/l
Naphthalene	0.21 mg/l
Total PCBs	0.005 mg/l
Phenol	0.029 mg/l
Tetrachloroethylene	0.078 mg/l
Toluene	0.042 mg/l
Trichloroethylene	0.039 mg/l
Chromium	1.665 mg/l
Lead	0.48 mg/l
Nickel	2.535 mg/l
Zinc	1.575 mg/l

(a) These limits were selected for the indicator chemicals identified in the Risk Assessment as being representative of pond sludge characteristics. If characterization of the wastewater indicates the presence of other compounds of concern, standards will be developed for these compounds in a fashion similar to the original indicators.

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TABLE 4

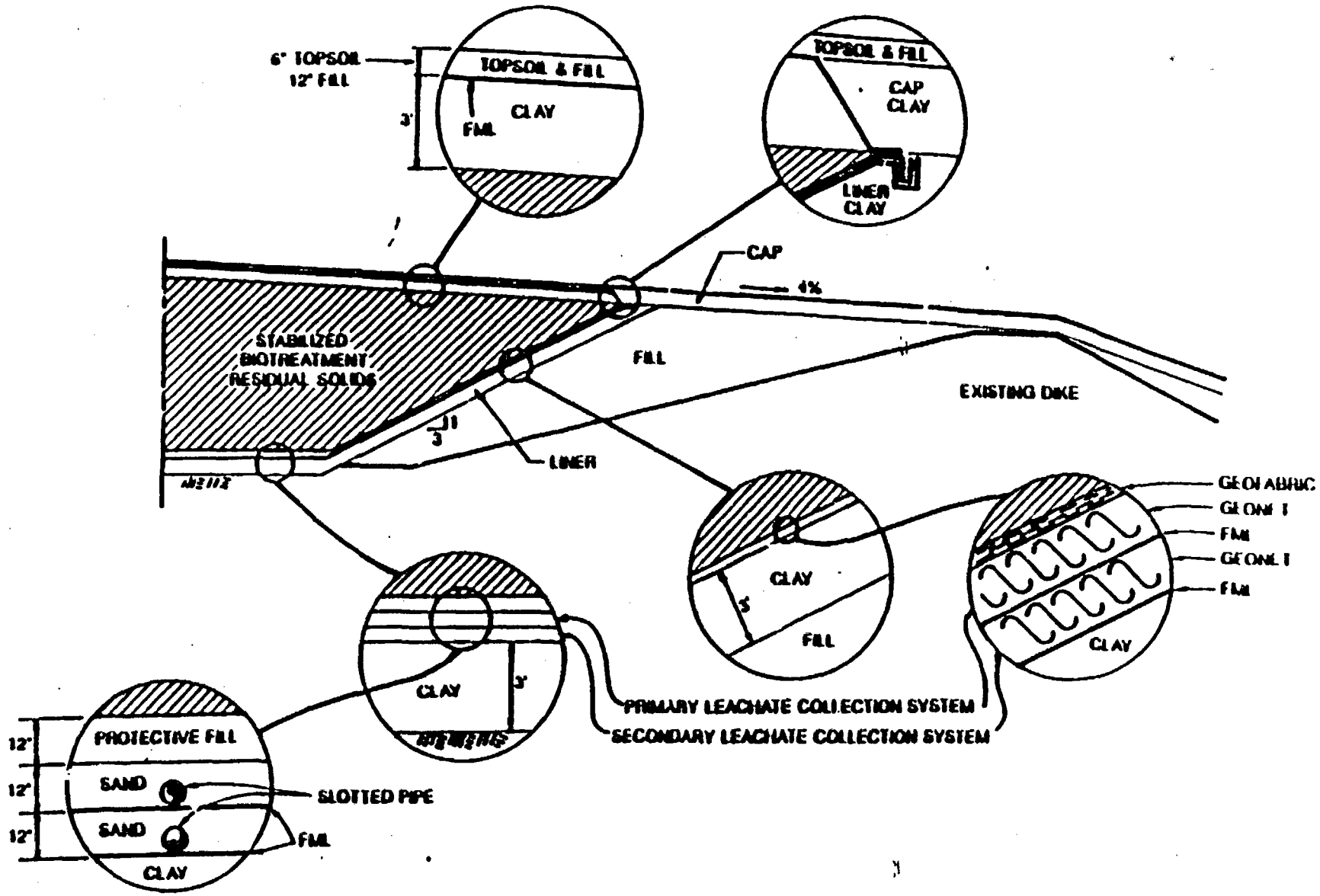
Sampling Frequency
Wastewater Effluent Discharge Sampling and Analysis

EFFLUENT CHARACTERISTIC	FREQUENCY[a]	SAMPLE TYPE
Flow Rate	Continuous	Record
pH	1/week	Grab
BOD_5	1/week	8-Hour Composite[b]
Oil and Grease	1/week	8-Hour Composite[b]
Total Suspended Solids	1/week	8-Hour Composite[b]
Organics	1/week	8-Hour Composite[b]
Metals	1/week	8-Hour Composite[b]

[a] During operation of the wastewater treatment facility.

[b] Four grab samples over eight hours combined as equal volumes.

Wastewater Treatment Residual Management	Characterized and treated as appropriate before disposal in the main pond.
Liner (if needed)	Underlies selected residual solids. Collects and removes stormwater entering lined area before closure and leachate generated (if any) after closure. Constructed of the following layers (from top to bottom):
Protective Fill	Protects leachate collection system from equipment used to place waste within liner.
Primary Leachage Collection System	
High Permeability	Transmits stormwater and later leachate (if any) to collection pipes and sumps.
60 mil. Geomembrane	Serves as hydraulic barrier.
Secondary Leachage Collection System	
High Permeability Sand	Transmits any leaks through geomembrane to collection pipes and sump.
60 mil. Geomembrane	Serves as barrier to any stormwater leachate which penetrates first geomembrane.
3 feet 10^{-7} cm/sec Recompacted Clay	Serves as hydraulic barrier if geomembranes are eventually breached.
	See Figure A-1 for liner concept illustration and liner details.
Collection Sumps	Contain submersible pumps which automatically pump collected liquids to wastewater treatment or to leachate storage tank. Constructed as concrete manholes to



NOT TO SCA

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FIGURE A-1
CAP AND LINER DETAILS
HALF SECTION THROUGH CLOSED POND
Sheridan Disposal Services

	enable maintenance of collection system.
Leachate Storage Tank	Holds leachate [illegible] after wastewater treatment system is demobilized. Leachate volume is recorded, leachate is analyzed and disposed of off-site to the extent discharge limitations are exceeded. Tank within secondary containment berm.
Cap - General	Encourages rainfall run-off and minimizes amount of percolating water able to contact wastes and residual solids in dike and within main pond. Hydraulic conductivity less than or equal to hydraulic conductivity of underlying soils or liner. Constructed of the following layers (from top to bottom):
6 in. Topsoil and 12 in. Fill	Capable of supporting native grasses. Sheds rainwater.
30 mil. Flexible Membrane Liner	Serves as water barrier. Placed above area lined with FML.
3 ft. 10^{-7} cm/sec Recompacted Clay	Serves as water barrier.
Gas Vent Piping	Bedding in shallow trenches in fill. Collects gases (if any) trapped under cap, exhausts through collection sump manhole risers.
Fill	Soil from the site and residual solids from biotreatment. Supports cap. Soil includes evaporation system soils and common borrow. All materials compacted within specified limits of density. Debris and crushed drums buried

	within fill. Only common borrow placed above outside slope of main pond dike.
Cap Run-Off Control	Erosion control berms on cap divert run-off to concrete pipes that convey accumulated stormwater run-off to swales that discharge to surrounding area. Energy-dissipating splash pads or rip rap protect swales where required.
Post Construction Stormwater Run-off	Drains as sheet run-off to Clark Lake, thence by way of Donohue Creek to Brazos River. Diverted from active remedial construction activity areas by run-on control berms.
Affected Stormwater Handling	Generated only during construction. Drains to collection points, pumped by portable units to wastewater treatment system.
All Weather Roads	Allow access to maintenance and monitoring stations during non-flood conditions.
Perimeter Fence	Protects facilities from vandalism and minimizes contact of people and large animals with waste during remediation. Controls access after remediation. Allows passage of small animals and predators. Maintained by periodic inspection during and after remediation.
Demolition	Tanks and equipment cleaned on site, sold as scrap steel. Non-steel components or components not readily cleaned are buried within fill.

Ground Water Monitoring	
Upgradient Wells	2 shallow, 2 deep
Downgradient Wells	5 shallow, 3 deep
Sampling Events	
Frequency	Quarterly for the first year, semiannually for years two through five, annually for years six through ten, and every five years thereafter.
Ground Water	12 samples, 2 replicates, 1 field blank.
Surface Water	1 upstream, 2 downstream samples
Analytical Slate	
Metals	As, Ba, Cd, Cr, Pb, Hg, Ni, Se, Ag, Zn
Organics	HSL Volatiles, Semi-Volatiles and Pesticides, and total PCBs.

APPENDIX B

QUALITY ASSURANCE PROJECT PLAN FOR REMEDIAL DESIGN

APPENDIX B

QUALITY ASSURANCE PROJECT PLAN FOR REMEDIAL DESIGN

SHERIDAN DISPOSAL SERVICES SITE WALLER COUNTY, TEXAS

Prepared for:

The Sheridan Site Committee

August 8, 1989
W.O. #91-22

Prepared by:

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QUALITY ASSURANCE
PROJECT PLAN
FOR
REMEDIAL DESIGN

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

1 - INTRODUCTION

This Quality Assurance Project Plan (QAPP) is intended to be consistent with Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, December 29, 1980 (QAMS-005/80). The referenced guidelines apply to environmental monitoring and measurement efforts and do not logically apply to remedial design. However, the plan adopts the concept of quality assurance during remedial design and construction and focuses on the production of a Construction Quality Assurance (CQA) Plan that will apply this concept to the construction of the planned facilities. The QAPP, the CQA plan and a QA/QC plan will collectively address quality assurance needs for the entire remedial action.

This QAPP defines quality assurance objectives and the appropriate organizational structure to implement those objectives during predesign and design activities. The scope of quality assurance during design is limited to verifying the accuracy of plans, specifications and design analyses.

1.1 Project Description

This project is the detailed design of facilities for the remediation of the Sheridan site. The product of this project will be a set of engineering specifications and drawings which will assure that the facilities are constructed in accordance with the plans and specifications.

1.2 Quality Assurance Objectives

The quality assurance objectives are as follows:

1. Develop a set of specifications, drawings and a CQA plan which are consistent with each other and with supporting design analyses.

2. Develop a set of specifications, drawings and a CQA plan which cover foreseeable questions which the construction contractor might have regarding conformance with the specifications.

3. Monitor and document construction to assure that the planned facilities are built in accordance with the plans, specifications and CQA plan.

1.3 Project Organization

Figure 1-1 shows the relationships and responsibilities for quality assurance on this project.

FIGURE 1-1

Design Quality Assurance

EPA . . . Sheridan Site Trust

Project Manager

Design Engineer

2 - CHECKING PLANS, SPECIFICATIONS AND DESIGN ANALYSES

Plans, specifications and design analyses will be checked and approved. Review of plans and specifications will be performed by the Project Manager. Checking of design analyses will be performed by an individual who has a level of qualification at least sufficient to originate the design analyses, and the checker will not be the originator. Review and approval of all plans, specifications and design analyses will be by the Engineer.

2.1 Plans (Design Drawings)

Design drawings will be checked prior to each submittal for consistency, clarity and completeness. The different notes, views and details will be compared to confirm that they are in agreement, comply with the specifications, and clearly and completely define the intent of the design. References to details, sections and notes will be confirmed, and redundant detail or duplication will be removed. New or revised dimensions will be checked to confirm that they are based on approved design calculations.

Revision blocks will be completed for each change after drawings are complete. Each revision will be identified by number, description, date and a responsible individual within the revision block and by number where it occurs on the appropriate note, view or details).

2.2 Specifications

New or revised specifications will be checked prior to each submittal for clarity and completeness and agreement with the CQA plan. Performance criteria will be checked to confirm that they are based on approved design calculations.

Specifications prepared for one project may be used (when the applications and conditions are similar) by another project. These previously used specifications shall be rechecked for applicability, clarity and completeness.

2.3 Design Analyses (Calculations)

Design analyses include design calculations, design assumptions, design test results and documentation of appropriate design standards.

The following procedures for preparing, checking and approving design calculations are applicable to all design analyses.

Calculations will be checked as they are prepared and before the results are reflected in design drawings and specifications.

2.3.1 Preparing Calculations

a. Calculations will be made on standard calculation sheets shown in Figure B-1, or equivalent information will be included on non-standard sheets.

b. The Calculation Title Sheet shown in Figure B-2 will be prepared before calculations are submitted for checking and review. The overall objective of the calculation will be stated on this title sheet. The names of originators and checker who have made and checked the calculation package will also be listed.

c. Each calculation will list or reference the applicable criteria, design assumptions, codes, standards and references. Major equation sources will also be listed. Listings and references will appear in the calculation sheets, where appropriate, but preceding their use. The source or derivation or equations not in common usage will be shown when they are introduced into the calculation.

d. Design assumptions will be clearly stated so that they may be understood by the checker. Clearly stated assumptions are required in the event it is necessary to revise calculations, or to make them available to outside parties.

e. Established design criteria and previously developed and approved designs, methods, and solutions should be used as guidelines, and identified as to source. The applicability of existing solutions to new problems should be determined before such design methods or solutions are adopted.

FIGURE 2-1

By 1 Date 2 Subject 5 Sheet No. 10 of 9

Chkd By 3 Date 4 7 W.O. No. 6

FIGURE 2-1 (Cont'd)

Calculation Sheet Instructions

1. Originator's initials. (All Sheets)

2. Date originator worked on this sheet. (All Sheets)

3. Checker's initials. (All Sheets)

4. Date this calculation sheet initialed by checker. (All Sheets)

5. Title of project or study. (Sheet 1 Only)

6. Work Order No. (All Sheets)

7. The name of the system, structure or component. (Sheet 1 only)

8. The calculation number appearing on the calculation cover sheet. (All Sheets)

9. A revision number will be added, where necessary, in the upper right hand corner.

10. Each sheet will have a unique identification.

CALCULATION TITLE SHEET

PROJECT 1 JOB NO. 2 SHEET 3 OF 4

SUBJECT 6 TOTAL NO. OF SHEETS 5

ORIGINATOR SIG. 7 DATE 8 FILE NO. 11

CHECKER SIG. 9 DATE 10 CALC. NO. 12

RECORD OF ORIGINAL ISSUE AND REVISIONS

REV. NO.	REVISION DESCRIPTION	ORIG	DATE	CKR	DATE	APPRO	DAT
13	14	15	16	17	18	19	20

RESULTS OF CHECKER REVIEW

REV. NO.	COMMENTS
13	21

CALCULATION OBJECTIVE: 22

SEE ATTACHED INSTRUCTIONS

MANDATORY FORM

FIGURE 2-2 (Cont'd)

Calculation Title Sheet Instructions

Item No.		Instructions
1,2,4,7,9	-	Self Explanatory
3	-	Calculation Title Sheet is numbered sheet 1.
5	-	Total number of sheets in calculation package including computer listings and output, appendices and checker's alternate calculation sheets.
8	-	Date original issue of calculation completed.
10	-	Date original issue of calculation completed.
11,12	-	File No. and Calculation No. are usually the same.
13	-	Revision number of calculation package. Original issue is revision number "0".
14	-	Description (e.g. Preliminary, Final, revised sheets 7 & 8, etc.).
15,16	-	Signature initials of person performing revision (originator for revision 0) and date of revision.
17,18	-	Signature initials of revision checker and date check performed.
19,20	-	Signature initials of Engineer reviewing and approving calculation package and date of approval.
21	-	Checker's comments for each revision (e.g. Alternate calculation sheets 1-5 attached).
22	-	Calculation objective.

f. Calculations will be orderly and complete with enough sketches or drawing references so that the work can be understood. Diagrams indicating data (such as loads, flows, and dimensions) will be included along with adequate sketches of all important details not considered standard.

g. Where detailed calculations are not warranted, a calculation sheet will be completed to clearly state the basis of how the design data was otherwise developed. Such cases may include use of recognized tables, or where judgment is employed in sizing equipment. Note, however, that these data may otherwise be regarded as assumptions forming the basis of other calculations and should be treated accordingly.

h. All calculations involving computer programs and computer generated output will have an accompanying calculation package containing sufficient information for a competent individual to accept or verify the results using the inputs and assumptions. This will include a statement of the problem, design inputs, assumptions and computer programs used.

i. To ensure traceability of computer based calculations, each computer run will be numbered and cross referenced with output tables and other associated results presented in the calculation package.

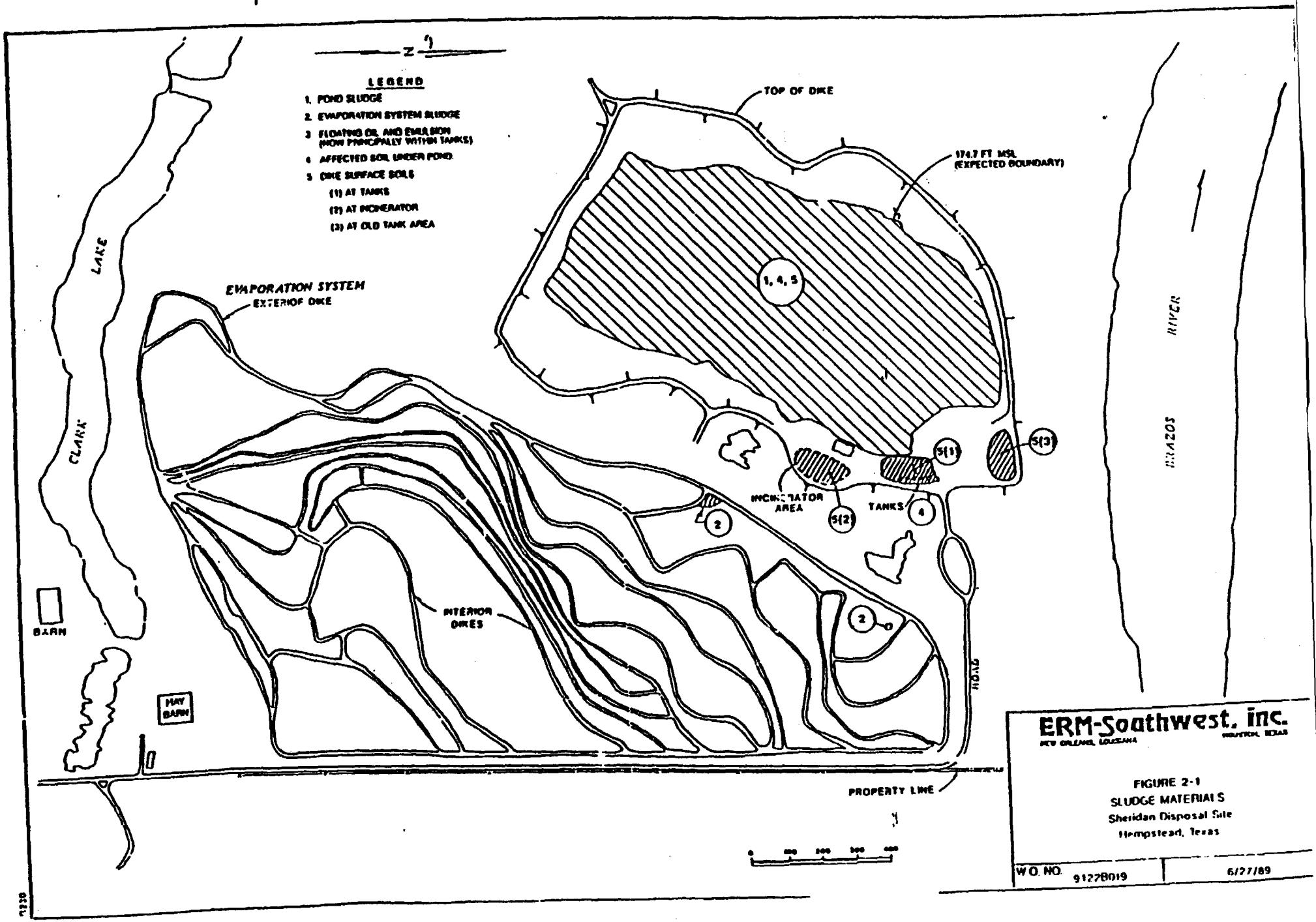
j. If a programmable calculator is used, the calculation package will be sufficiently detailed such that the checker can verify the results. Where feasible the calculation package should include: 1) a flow chart of the program including algorithms used; a listing of the program steps with user instructions and the calculator name and model number.

2.3.2 Checking Calculations

After verifying the basis of a calculation, the checker has the option of performing a mathematical check or verifying the calculation results by an alternate means. Approximation methods may be adequate for checking, depending on the judgement of the approver. Alternate calculations by the checker will be sheet numbered independent of the calculation being checked, signed and dated on each sheet by the checker as the originator and indicated on the title sheet of the calculation package, e.g., "Alternate Check Calc. Sheets 1-5 attached".

Calculations prepared for one project may be used (when the applications and conditions are similar) by another project. These previously used calculations will be rechecked for applicability, criteria, and assumptions, and a new title sheet shall be provided for the calculations, with sign-offs by the checker and reviewer as applicable.

For traceability, cross reference drawing numbers to calculation packages.


N
LEGEND
1. POND SLUDGE
2. EVAPORATION SYSTEM SLUDGE
3. FLOATING OIL AND EMULSION (NOW PRINCIPALLY WITHIN TANKS)
4. AFFECTED SOIL UNDER POND
5. DIKE SURFACE SOILS
(1) AT TANKS
(2) AT INCINERATOR
(3) AT OLD TANK AREA
TOP OF DIKE
174.7 FT MSL (EXPECTED BOUNDARY)
1, 4, 5
EVAPORATION SYSTEM
EXTERIOR DIKE
CLARK LAKE
BRAZOS RIVER
5(1)
5(3)
INCINERATOR AREA
5(2)
TANKS
4
2
2
INTERIOR DIKES
BARN
HAY BARN
HIGHWAY
PROPERTY LINE
0 100 200 300 400
ERM-Southwest, inc.
NEW ORLEANS, LOUISIANA
HOUSTON, TEXAS
FIGURE 2-1
SLUDGE MATERIALS
Sheridan Disposal Site
Hempstead, Texas
W.O. NO. 91278019
6/27/89

APPENDIX C

WASTE MATERIALS EXCAVATION PLAN

APPENDIX C

WASTE MATERIALS EXCAVATION PLAN

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

Prepared for:

The Sheridan Site Committee

August 8, 1989
W.O. #91-22

Prepared by:

ERM-SOUTHWEST, INC.
16000 Memorial Drive, Suite 200
Houston, Texas 77079
(713) 496-9600

L656

WASTE MATERIALS EXCAVATION PLAN

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

1 - SCOPE AND OBJECTIVES

This pond excavation plan defines the sequence and extent of the excavation of the different waste materials which will be subjected to treatment. Waste materials are defined as the sum of the following materials:

1. All material containing greater than 25 ppm of PCBs. This material includes the sludges contained in the pond and evaporation system;

2. Floating oil and emulsion in the pond and in on-site storage tanks;

3. Affected soil under pond. Affected soil under the pond is defined as soil that is intermixed with sludge or contains greater than 25 ppm of PCBs. The extent of affected soil under the pond will be determined during the remedial design/remedial action.

4. Dike surface soils. This material shall include: 1) oily soil on the inside dike slope between the current sludge level to the highest level the floating oil layer has contacted; 2) Grossly contaminated soil and sludge deposits visible on the dike. At a minimum, this shall include the soil and sludge in the vicinity of the treatment tanks and incinerator in the north-northeastern portions of the dike.

5. The wastes described in items 1-4 above address all wastes containing over 25 ppm of PCBs and/or high concentrations of other organics such as benzene and phenol, thus no action level for non-PCB organics is required.

The delineation of materials requiring remediation is specified in this plan. The volume of excavation is defined as both lateral boundaries and depth of excavation. Where depth or lateral extent of excavation is not already defined, a sampling and analysis plan is presented to provide confirmation that the remaining soil contains less than 25 ppm PCBs.

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	2.2 Evaporation System Sludge	C-2
	2.3 Floating Oil and Emulsion	C-2
	2.4 Affected Soil Under Pond Sludge	C-2
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3	VERIFICATION SAMPLING AND ANALYSIS	C-5
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	3.3 Resampling Procedures	C-9
	3.4 Sample Representativeness	C-11
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2 - LIMITS OF EXCAVATION

The following paragraphs describe the lateral extent and depth to which each of the waste materials will be excavated for subsequent treatment. Figure 2-1 shows the approximate lateral extent of each of these materials in plan view, except that floating oil and emulsion now resides in tanks (which are also shown).

2.1 Pond Sludge

This material is an oil and solids-in-water mixture lying immediately under the layer of water in the pond. It contains in excess of 25 ppm PCBs and is pumpable. This material will be removed wither separately or with some of the underlying affected soil which contains in excess of 25 ppm PCBs. Since both the pond sludge and afffected soil will be excavated and treated, the definition of the vertical boundary between these materials is not critical. Pond sludge extends laterally to the point where soils containing less than 25 ppm PCBs on a dry weight basis are reached.

2.2 Evaporation System Sludge

This material is visually evident at two points where pond water was discharged into the evaporation system. One area is a 20 foot radius of sludge and soil solids deposited around the terminus of a pond water transfer pipe. The other area is a ten foot by ten foot deposit of unknown origin. Both areas have been shown to contain PCBs above 25 ppm. The depth and lateral extent of this material will be determined by verification sampling (Section 3).

2.3 Floating Oil and Emulsion

This material is stored on-site in eight 450 bbl tanks on the north-northeast portion of the dike. It was collected from the pond surface in 1987. Some of this material remains on the pond surface, but cool temperatures seem to cause it to sink and effectively became pond sludge. Any emulsion resulting from the treatment of pond water will be considered part of this material. Otherwise, it is considered to reside only in the eight tanks.

2.4 Affected Soil Under Pond Sludge

This material is the soil under the pond sludges that has become intermixed with the pond sludges such that it has a PCB content greater than 25 ppm dry weight basis.

2.5 Dike Surface Soils

This material is the oily surface soil containing greater than 25 ppm PCBs on a dry weight basis on the inside dike slope. It extends from the pond sludge level to elevation 174.7 ft. MSL, the highest level the floating oil layer has contacted. This soil will be removed in layers until soils containing less than 25 ppm PCBs on a dry weight basis are reached.

Also included in this category is the grossly-contaminated soil and sludge in (1) the diked secondary containment area for the eight 450 bbl tanks, (2) the immediate area of the incinerator, and (3) the old tank area, all three areas being on the north-northeast portion of the dike. This grossly-contaminated soil and sludge around the eight tanks, incinerator and old tank area will be excavated until soil containing less than 25 ppm PCBs on a dry weight basis is reached.

3 - VERIFICATION SAMPLING AND ANALYSIS

3.1 Scope and Objectives

The objective of verification sampling is to demonstrate that surface soil remaining after excavation within a defined area does not contain PCB concentrations greater than the 25 ppm dry weight action level. The determination of the PCB concentration in the remaining surface soil will be made by collecting composite representative samples in a defined sampling area and analyzing for total PCBs.

Representativeness is achieved by compositing grab samples taken in an evenly-spaced grid pattern within the verification area, by taking a sufficient number of samples to satisfy statistical significance considerations, and by taking grab samples in a rational, consistent manner.

3.2 Sampling Procedures

Excavation areas will be subdivided into verification sampling areas to be evaluated independently. Thirty-six grab samples of soil will be collected from each verification area in a rectangular grid pattern. Four composite samples, each made up of nine contiguous grab samples, will be constructed from the grab samples. To increase the confidence level of the data and probability of detecting hot spots, two judgmental grab samples will be included for each verification area. The basis for collection of those samples is not controlled. Thus a total of six samples for analysis will be produced for each verification area. Table 3-1 summarizes the sample spacing and approximate amount of sampling to be done in each excavation area.

Figure 3-1 is a generalized sketch of sampling locations and compositing strategy within a verification area.

The sampling equipment to be used is listed in Table 3-2.

The sample containers will all be of glass and with Teflon^{R}-lined caps. Individual grab samples will be collected, each in one 250 ml jar, and retained for potential analysis. Composite samples will be accumulated in a stainless steel mixing bowl, thoroughly blended with a stainless steel spoon, placed in a 250 ml jar and sent for analysis.

The following protocol will be followed at each grab sample location:

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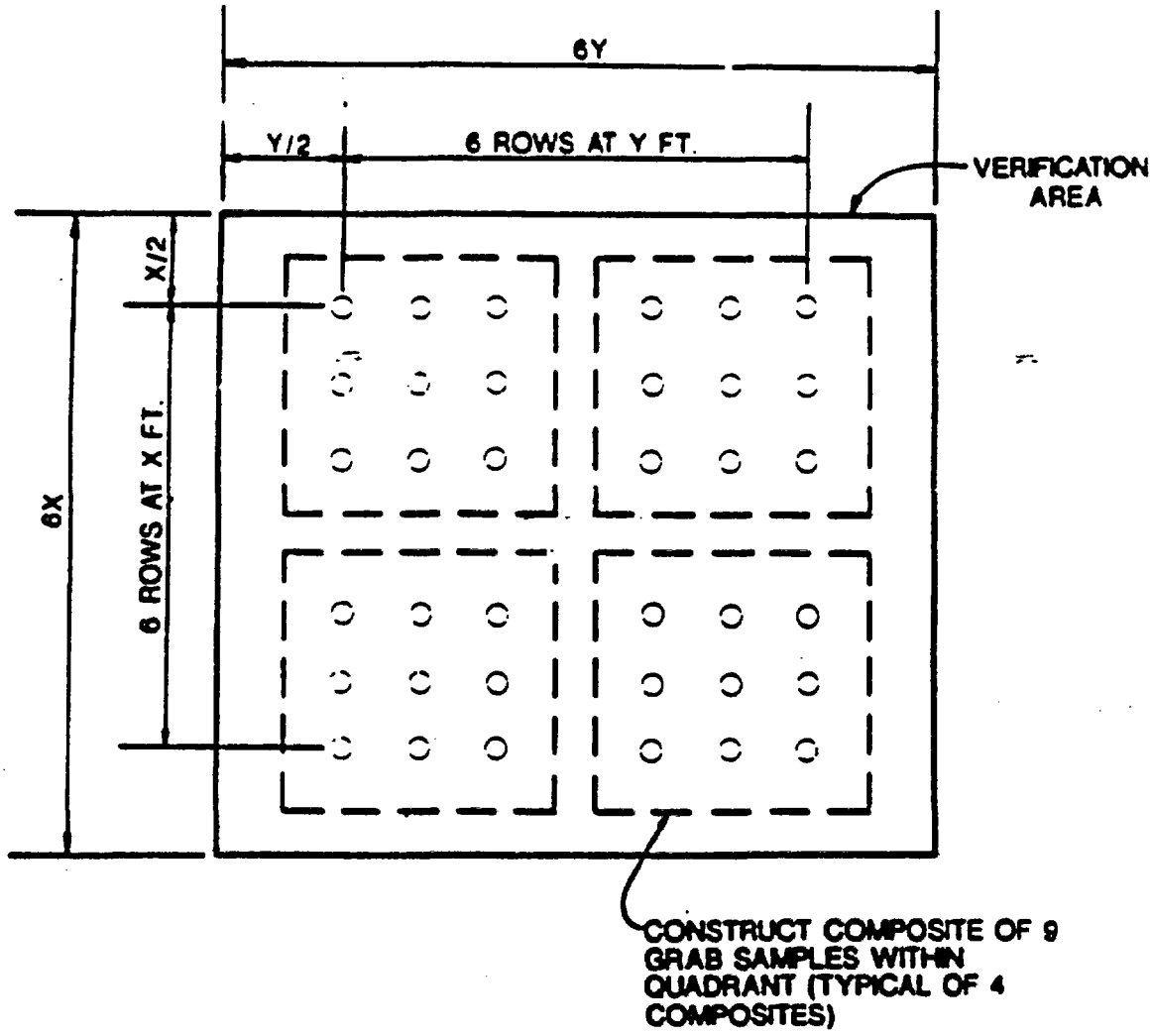
Table 3-1

Description of Verification Sampling Areas
Excavation Verification Sampling

Sheridan Disposal Site

Excavation Area	Approximate Area Size (acres)	Max. Grid Dimensions X	Max. Grid Dimensions Y	Approximate Number of Verification Areas	Grab Samples	Composite Samples	Total Judgement Samples
Evaporation System Sludge	0.25	10	10	2	72	8	4
Affected Soil on Dike and Under Pond	15	40	40	12	432	48	24



ERM-Southwest, Inc.
NEW ORLEANS, LOUISIANA HOUSTON, TEXAS

DATE 3/03/89	W.O.NO. 9122A007

FIGURE 3-1
SAMPLING AND COMPOSITING GRID
EXCAVATION VERIFICATION SAMPLING
Sheridan Disposal Site
Hempstead, Texas

Table 3-2

Sampling Equipment and Materials

- Precleaned glass sample jars with Teflon^R-lined caps
- Cardboard templates (20 cm x 10 cm square)
- Stainless steel trowels, Teflon^R scoops, or laboratory spatulas (precleaned)
- Disposable wiping cloths
- Survey stakes for sample location marking
- Nails to measure 10 cm x 20 cm samples
- Container of distilled water for decontamination
- Stainless steel mixing bowls and spoons
- Coolers with ice or ice packs

1. Select a small area of soil at the sampling location. If the surface is fairly rough or uneven, attempt to level by tamping or scraping excess soil.

2. Place clean sampling template on soil and mark areas of 10 cm by 20 cm with four steel pins. Scrape soil within this area to a depth of approximately 1 cm with a trowel and collect soil in a steel bowl. Blend sample and split into two approximately equal parts. Place one part in a 250 ml sample bottle. Place remaining part in composite accumulation jar.

3. Accumulate nine grab samples to form one composite sample.

4. Cap jars as filled and label appropriately. Place jars in a cooler containing ice. Note collection in log book.

5. After each composite is complete, decontaminate or obtain new template, trowel, gloves and other equipment that comes into contact with soil while sampling.

6. Send all sample containers to the designated analytical laboratory with analysis instructions.

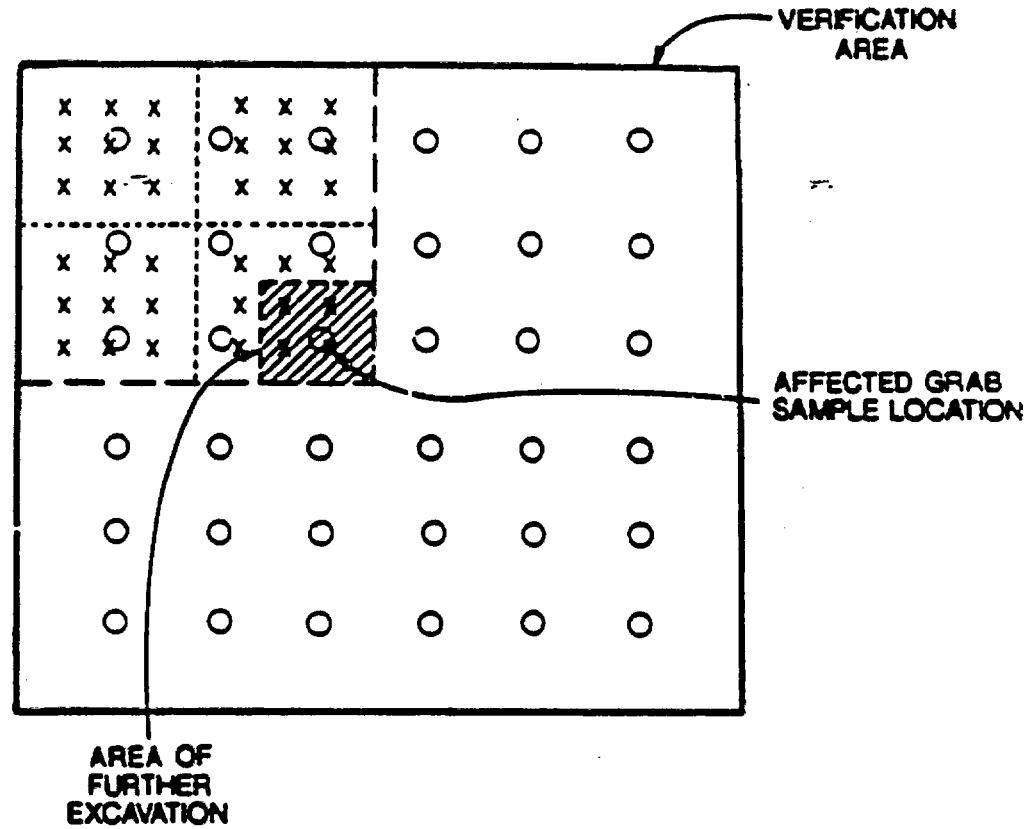
3.3 Resampling Procedures

If a composite is analyzed and found to contain a concentration greater than 25 ppm of total PCBs on a dry weight basis, the following will apply:

All grab samples that correspond to the composite sample of concern (nine grab samples) will be analyzed for PCBs in the same way as the composite. If any grab sample results in a PCB concentration greater than the 25 ppm criterion, then the portion of the verification area that corresponds to the affected sample will be further excavated to approximately one-half foot in depth. Figure 3-2 shows an example of this. If no grab sample analyzed results in an exceedance of the 25 ppm criterion, then the composite sample analysis will be regarded as unrepresentative, i.e., either due to analysis or sample contamination.

After further excavation of the affected portion, the area corresponding to the affected composite sample will be resampled by selecting thirty-six sample locations and two judgmental samples in a manner as described previously for the entire verification area.

Four composites samples will be produced and analyzed for the resampled area. If the four resample-composite results meet the PCB criterion, then no further action is required in the



X = RE-SAMPLING LOCATIONS

ERM-Southwest, Inc.
NEW ORLEANS, LOUISIANA HOUSTON, TEXAS

DATE 3/03/89	W.O.NO. 9122A008

FIGURE 3-2
RESAMPLING PROCEDURE
EXCAVATION VERIFICATION SAMPLING
Sheridan Disposal Site
Hempstead, Texas

R230

resampled portion and the original area is verified as not containing sludge materials. If a resample - composite exceeds the PCB criterion, then the above excavation plan will be re-initiated.

If a judgmental sample is analyzed and found to contain PCBs above the 25 ppm criterion, then the grab samples within the quadrant of the judgmental sample will be analyzed as described above. The results of both the judgemental sample and the grab samples will be used to define the area for further excavation.

3.4 Sample Representativeness

This sampling is a form of systematic random sampling as defined in SW-846, Third Edition. Grab sample collection locations follow a pre-determined geometric pattern to a pre-determined depth with regular spacing between locations. The established pattern is followed as closely as site conditions allow. Composite samples are constructed from pre-selected grab samples. The concentration variability is appropriately assessed through the number of grab samples collected and the number of samples used to construct a composite sample.

A grid pattern has been found to be more likely to detect an affected area of a given size than the same number of purely random sample locations, and is considered easier to implement in the field. The number of samples was determined from geometric considerations for optimizing a sample coverage area.

The four composite samples adequately represent the chemical character and variability of the first centimeter of soil in a defined verification area. Among the four composite soil samples, the maximum concentration of PCBs will determine whether the defined verification area is free of affected soil.

3.5 QA/QC Procedures

A minimum of one field blank per day of verification sampling will be produced from off-site, non-affected soil, and will be preserved and transported as composite samples. Field blanks will be left open in the sampling area for the duration of any sampling to capture wind-blown dust. A minimum of one field duplicate per day of verification sampling will be produced from one of the composite samples.

Complete QA/QC procedures for the management of field sampling and subsequent chemical analysis will be produced as part of the QA/QC Plan and will include a sample numbering system, field data sheets or data tracking system, data management, data validation and other QA/QC functions.

3.6 Documentation and Shipping

Documentation and shipping will be as detailed in the Appendix B sampling and analysis plan for borrow material.

3.7 Analytical Procedures

Analyses will be requested initially for only the composite samples, field duplicates and blanks. The individual grab samples will be preserved and retained for possible future analysis.

Analysis will be for PCBs reported as total Arochlor content, dry weight, and will be performed with SW-846, Third Edition, analytical method 8080.

All results will be collected and summarized in the site remediation report. No area may be capped prior to EPA review and approval of the verification sampling.

APPENDIX D

BORROW AREA SAMPLING AND ANALYSIS PLAN

APPENDIX D

BORROW AREA SAMPLING AND ANALYSIS PLAN

SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

Prepared for:

The Sheridan Site Committee

August 8, 1989
W.O. #91-22

Prepared by:

ERM-SOUTHWEST, INC.
16000 Memorial Drive, Suite 200
Houston, Texas 77079
(713) 496-9600

L656

BORROW AREA SAMPLING AND ANALYSIS PLAN

SHERIDAN DISPOSAL SERVICES SITE
[illegible] COUNTY, TEXAS

1. Scope and Objective of Sampling Program

The following sampling program will be carried out during the preliminary design phase (Task 3), and will be consistent with the Work to be Performed section of the Consent Decree. The objective of this sampling program is to confirm that there is an adequate quality and quantity of on-site borrow material available for the construction of the clay cap and for fill material under the cap. The suitability and availability of on-site borrow material may significantly affect the cost of the liner and cap construction.

Approximately 130,000 cubic yards of clay are needed for the cap, 9,200 cubic yards of clay for the liner and 183,000 cubic yards of material for attic fill (structural fill inside the dike and under the clay cap). A portion of the borrow material used to construct the foundation of the cap will be from the surface soils taken from the evaporation system. Approximately 135,000 cubic yards of material can be acquired from the 42 acre evaporation area if materials are excavated to a depth of two feet. Therefore, approximately 187,000 cubic yards of additional material must be obtained from borrow sources found on-site. If the borrow site has suitable material from ground surface to twenty feet below ground surface, approximately six acres of land will require excavation.

If the borrow material comes from the evaporation system where surface soils will have been removed, approximately 6.5 acres of land will require excavation.

A soil sampling program will be conducted to identify a suitable on-site borrow area. Approximately sixteen borings will be made over most of the square-mile of Sheridan property. Once a potential borrow area has been identified, four proof borings will be taken, one near each corner of the identified area. If possible, this location will be in an area where future excavation of soils will least disturb the land with regard to its present and future uses.

Also, a soil taxonomist will determine the depth of suitable topsoil in this location. Approximately 22,000 cubic yards of topsoil are required for the cap. This would require that the six-acre site have suitable topsoil of approximately 2.3 feet in

depth. If this is not the case, additional topsoil will be required from another on-site location.

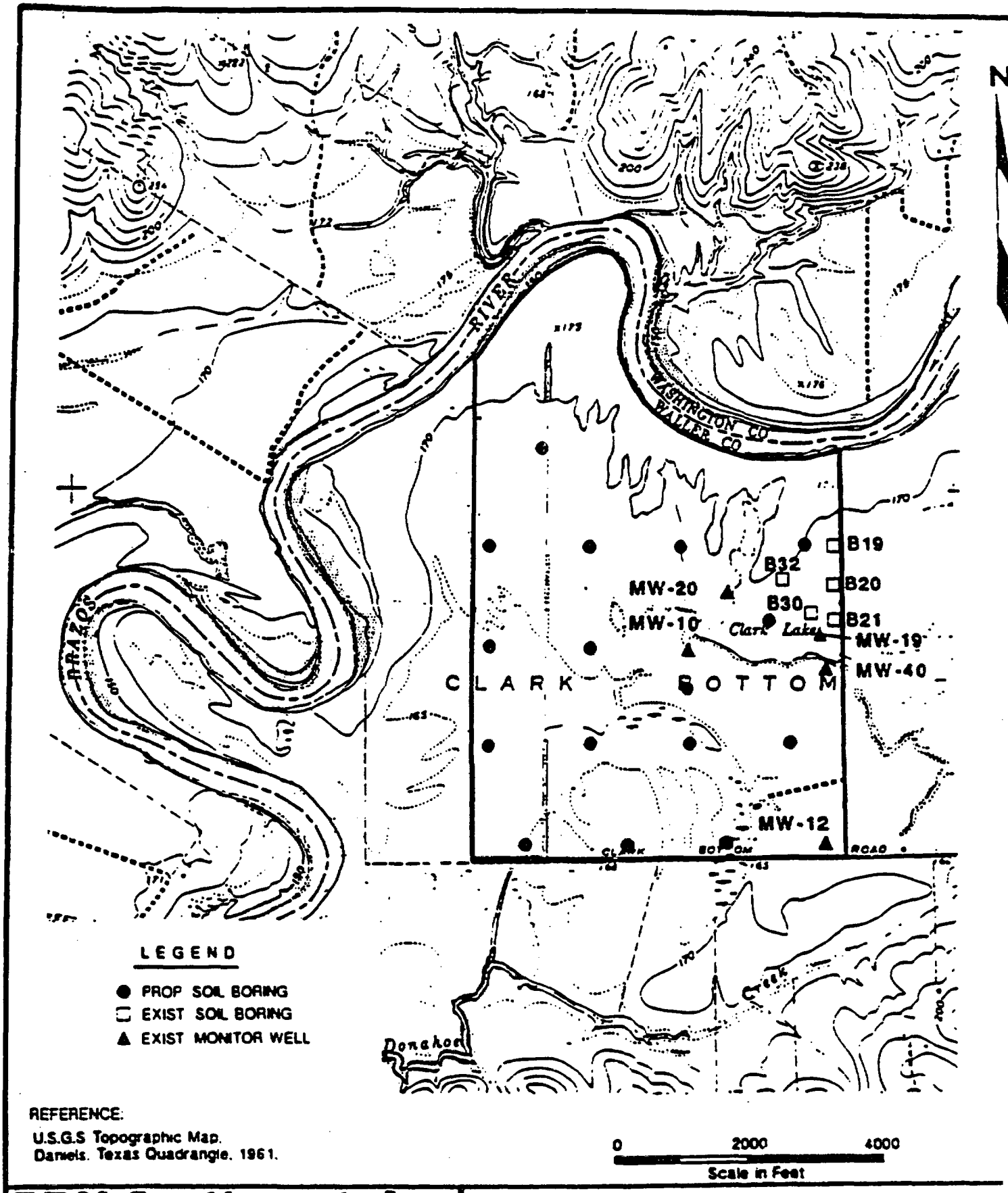
2. Material to Be Sampled

The subsurface of the property will be characterized by boring to an approximate depth of 25 feet. Borings at 1,500-foot centers will be taken in order to identify soil deposition trends and likely areas for a source of the borrow material. Preliminary locations for these borings are shown in Figure 1. Areas along the Brazos River (where sandy conditions are known to exist), and areas around the pond and dike will not be investigated. If, as the boring locations approach trends toward unsuitable soils, further borings in some areas may be discontinued. Conversely, borings will also be discontinued if the field geologist judges that trends from the borings performed indicate that at least twenty acres (three times the required area) of suitable material have been identified. Borings will resume if subsequent laboratory analyses indicate that the actual amount of suitable material found is not sufficient.

Once the soil characteristics of these borings have been determined, four proof borings will be taken to verify that a possible borrow source has the quantity and quality of soil required.

Several soil borings have already been made in the areas of potential interest as a part of monitor well construction between 1970 and 1984. These locations are identified in Figure 1, and the boring logs are attached. Boring logs for MW-12, MW-19 and MW-40 show clay to approximately 30 feet with a liquid limit of 47 to 73 and a plasticity index of 25-44. The hydraulic conductivity of MW-19 clay was determined in the laboratory to be 2.4 x 10^{-9} cm/sec. Boring logs for borings Nos. 19, 20, 21 show clay ranging in depth from ground surface to 15 to 21 feet with a liquid limit of 41 to 65 and a plasticity index of 28 to 42. Boring No. 21 clay shows a hydraulic conductivity of 8.6 x 10^{-9} cm/sec at a 10 foot depth. Boring No. 30 shows a silty clay from 4 to 25 feet deep.

Liner and cap design criteria by the State (TWC Industrial Solid Waste Technical Guideline No. 3, revised 12/19/83) recommend a liquid limit greater than 30, a plasticity index greater than 15 and a hydraulic conductivity less then 10^{-7} cm/sec. While the boring logs for MW-10, MW-22 and B-32 show only seven feet of clay, the other borings show potential for finding the needed borrow. Since the boring log for MW-10 indicated mostly sandy soil, the proposed boring for this location is approximately 700 feet south of MW-10 to determine if this soil has more clay content.



REFERENCE:
U.S.G.S Topographic Map.
Daniels. Texas Quadrangle. 1961.

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NEW ORLEANS, LOUISIANA HOUSTON, TEXAS

DATE 3/03/89	W.O.NO. 9122A015

FIGURE 1
ON-SITE BORROW MATERIAL BORINGS
Sheridan Disposal Services
Hempstead, Texas

R230

3. Detailed Sampling Procedures

The borings will be advanced to a 25-foot depth using a hollow stem auger. Continuous undisturbed samples will be taken. The borings will be logged in the field by an experienced geologist.

At least two clay samples will be obtained. The borings will be allowed to stand open for approximately 24 hours and a water level measurement will be made. This information plus water level information from the existing wells will allow an understanding of potential ground water constraints during excavation of the borrow pit. The borings will then be tremie grouted closed with a cement/bentonite mixture.

4. Documentation and Shipping

Samples for geotechnical analysis will be wrapped in foil. Samples for chemical analysis will be collected in laboratory-supplied sample containers. Sample containers will be of glass construction with Teflon[R] lid liners. Samples containers will be pre-cleaned by the laboratory and will be supplied with the appropriate preservatives (if required).

Samples will be labeled, wrapped with packing material, placed in laboratory supplied coolers, iced and shipped via overnight courier (e.g. Federal Express, Purolator, etc.) to the analytical laboratory. Coolers will be equipped with chain-of-custody paper seals to verify integrity of the contents of the coolers.

Sample bottle labels will contain the following information:

- Sample identification
- Name of collector
- Date and time of collection
- Place of collection

In addition to the labels and seals, the following documentation will also be kept:

1. Chain-of-custody (Figure 2)
2. Field log book
3. Sample analysis request sheet (Figure 3)

The chain-of-custody record will contain the following information: sample identification number, signature of collector, date and time of collection, place and address of collection, waste type, and signatures of persons in possession of the coolers and of people who break the chain-of-custody seals (the chain-of-custody record will be kept in an envelope taped to the outside of the cooler).

FIGURE 2

ERM-Southwest, Inc.

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME: SHERIDAN SITE COMMITTEE ON-SITE BORROW SAMPLING & ANALYSIS
SAMPLERS: (Signature)	

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	NUMBER OF CONTAINERS							REMARKS
N/A				X	SDS-CAP-1A								
N/A				X	SDS-CAP-1B								
N/A				X	SDS-CAP-2A								
N/A				X	SDS-CAP-2B								
N/A				X	SDS-CAP-3A								
N/A				X	SDS-CAP-3B								
N/A				X	SDS-CAP-4A								
N/A				X	SDS-CAP-4B								
N/A				X	SDS-CAP-5A								
N/A				X	SDS-CAP-5B								
N/A				X	SDS-CAP-6A								
N/A				X	SDS-CAP-6B								
N/A				X	SDS-CAP-7A								
N/A				X	SDS-CAP-7B								
N/A				X	SDS-CAP-8A								

Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Relinquished by (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by (Signature)
Relinquished by (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

FIGURE 3

ANALYTICAL REQUEST FORM

SHERIDAN DISPOSAL SERVICES SITE

CLIENT: _____ # SAMPLES: _____

SAMPLE #	DESCRIPTION	ANALYSIS REQUIRED:

SPECIAL INSTRUCTIONS: _____

_____

_____

RELINQUISHED BY: _____

DATE/TIME: _____

RECEIVED BY: _____

DATE/TIME: _____

Entries in the field log book will include the following items:

- Date and time of sampling
- Collector's name and affiliation
- Process sampled
- Type of waste
- Number, volume, and appearance of samples
- Any field measurements made
- Field observations

Any deviations from this sampling plan or any problems will be detailed in the field log. In general, sufficient information will be recorded so that the sampling can be entirely reconstructed without reliance on the collector's memory.

The sample analysis request sheet will accompany the sample to the laboratory. The sheet will specify the following items:

- Sample identification number
- Description of sample
- Date
- Analyses to be performed
- Analytical Methods
- QA/QC reporting requirements
- Report format requirements

All chain-of-custody documents, log books and similar records will be retained in case a question arises regarding the sampling portion of the petition.

5. Safety

During the soil sampling program, applicable health and safety procedures should be followed in accordance with the Worker Health and Safety Plan.

6. Analysis Procedure

The samples from the initial borings will be analyzed in the laboratory for moisture content, hydraulic conductivity, Atterberg limits and particle size distribution.

The borrow material to be used in the cap should have a recompacted permeability equal to or less than 1×10^{-7} cm/sec. The liquid limit should be greater than 30 and the plasticity index should be greater than 15. The cap material should consist of a well-graded, fine-grained, clay-rich soil with at least 30 percent of the particles passing a No. 200 sieve. Four proof borings will be analyzed for the parameters discussed above, Proctor density tests, as well as cation exchange capacity and sodium adsorption ratio (to measure the availability of nutrients for supporting plant growth).

The permeability of the soil samples will be determined by using the Corps of Engineers Method EM 1110-2-1906, November 1970, "Falling Head Rigid Wall Permeameter." The liquid limit and plasticity index of the soil samples will be determined by ASTM Standard Method D 4318-84. Particle size distribution will be determined using a hydrometer in accordance with ASTM Standard Method D 422-72 and moisture content will be determined by ASTM Standard Method D 2216-80.

The Proctor density tests on the proof borings will be performed in accordance with ASTM D698-78.

7. Reporting

A report will be prepared which summarizes the procedures and the results of the sampling efforts during the initial boring program and for the proof borings. Boring logs similar to those attached will be included as report figures. Each sample and the results of the parameters analyzed for will be listed in a summary table. The area chosen for the borrow pit will be shown on a plan drawing of the property. The proposed depth and acceptable use of the various strata will be presented and the rationale behind these choices will be discussed.

ATTACHMENTS

APPENDIX E

SPUR JETTY SYSTEM COE PERMIT

15.1
Tech Comm.

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553-1229

REPLY TO ATTENTION OF

May 24, 1988

Regulatory Branch

SUBJECT: Permit - 17110(02)

RECEIVED
MAY 28 1988
JOHN M. COTTERELL

Mr. Duane C. Sheridan
Route 1, Box 128
Hempstead, Texas 77445

Dear Sir:

Your request dated April 11, 1988 to amend Permit 17110 is approved. The amendment provides authorization to increase the spur jetty erosion control system in the Brazos River approximately 8 miles north of Hempstead, Waller County, Texas. The original permit authorized the construction of a spur jetty erosion control system.

The enclosed plans in two sheets, dated July 5, 1984, Revised April 11, 1988, will now become part of the permit. All conditions to which the work is made subject remain in full force and effect.

FOR THE DISTRICT ENGINEER:

Dolan Dunn
Chief, Processing Section

Enclosures

Copies Furnished:

Commander, Eighth Coast Guard District, Room 1330, Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

Director, Atlantic Marine Center, National Ocean Survey, ATTN: MOA232X1, 439 West York Street, Norfolk, Virginia 23510-1114

Director, Coastal Division, Land Resources Program, Texas General Land Office, 1700 North Congress, Austin, Texas 78701

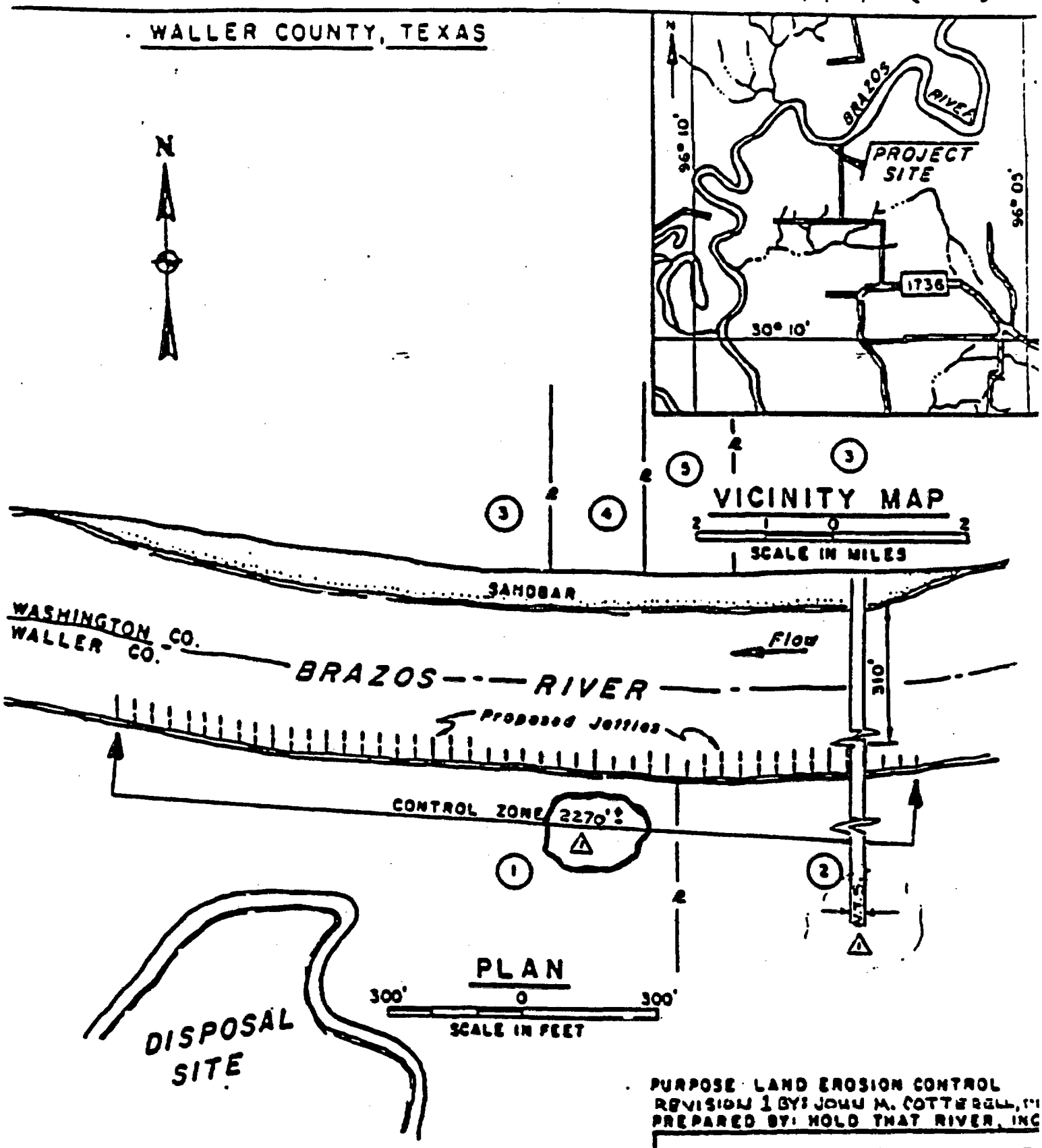
Field Representative, General Land Office, 105 San Jacinto, La Porte, Texas 77571

John M. Cotterell, P.E., P.O. Box 266, Bellaire, Texas 77401

Area Engineer, Fort Point Area Office, P.O. Box 1229, Galveston, Texas 77553-1229

1711^(02)

WALLER COUNTY, TEXAS



PURPOSE: LAND EROSION CONTROL
REVISION 1 BY: JOHN M. COTTERELL, [illegible]
PREPARED BY: HOLD THAT RIVER, INC

ADJACENT PROPERTY OWNERS:

1. DUANE SHERIDAN
2. OTIS STYERS
3. PERRY WALLER
4. PERRY SANTEE
5. CLARENCE SANTEE & E.O. JACKSON

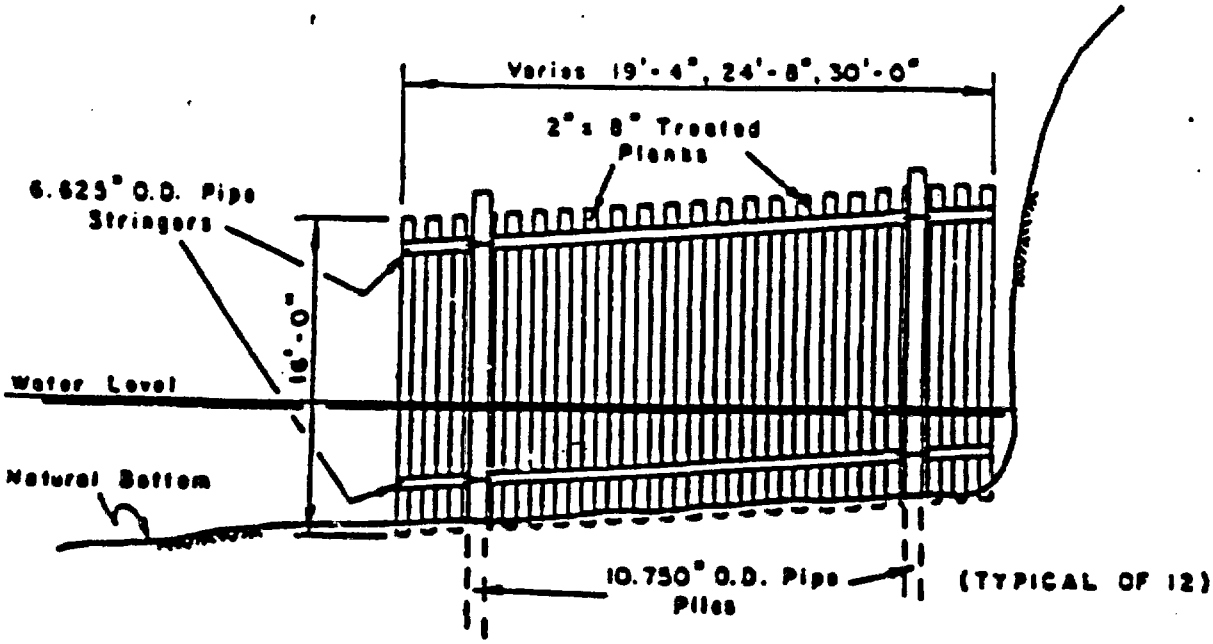
PROPOSED PERMEABLE SPUR JETTY SYSTEM

BRAZOS RIVER
WALLER COUNTY, TEXAS
APPLICATION BY: DUANE SHERIDAN

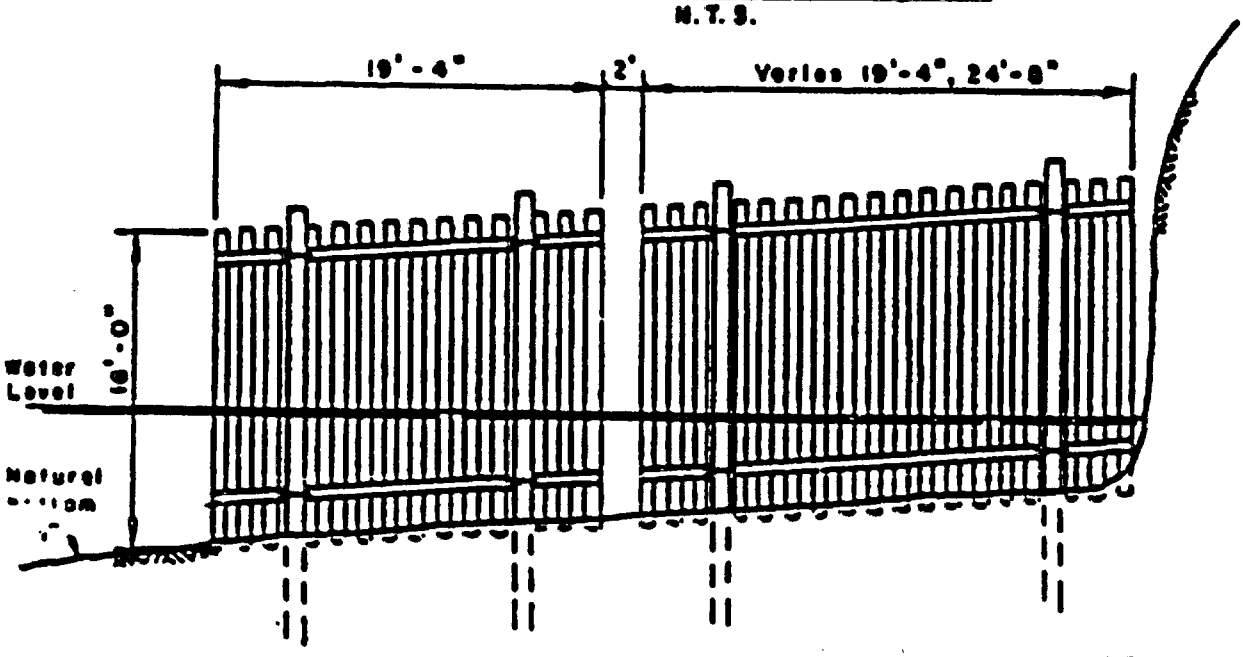
SHEET 1 OF 2 JULY 3, 198[illegible]

REV. 1: APRIL 11, 198[illegible]

17110 (02)



SINGLE PANEL JETTY
N.T.S.



(TYPICAL OF 2/2)

DOUBLE PANEL JETTY
N.T.S.

REVISION 1 BY: JOHN W. COTTERELL, P
PREPARED BY: HOLD THAT RIVER, IN

PROPOSED PERMEABL
SPUR JETTY SYSTEM

BRAZOS RIVER
WALLER COUNTY, TEXAS
APPLICATION BY: DUANE SHERIDA

SHEET 2 OF 2 JULY 5, 1

REV. 1 : APRIL 11 19

ERM-Southwest, Inc.

16000 Memorial Drive • Suite 200 • Houston, Texas 77079-4006 • (713) 496-9600
FAX NUMBER: (713) 496-9698

DATE: June 15, 1989

W.O. #: 91-22

TELECOPY COVER SHEET

FAX NO: (512) 451-5711 x 528

TO: Tom Dydek, TACB

FROM: Chris Tanner

MESSAGE: Attached: SSC proposal for air emissions limits at Sheridan site.

FAX ALSO SENT TO: Harry Walker 1-337-1177

Total Pages (including Cover Sheet): 7

Recipient's phone no. to verify receipt of FAX: (512) 451-5711

If you do not receive the total number of pages indicated above, please call (713) 496-9600. Thank you.

J33'

APPENDIX F

AIR QUALITY STANDARDS CORRESPONDENCE

PROPOSAL FOR
AIR EMISSIONS LIMITS
SHERIDAN DISPOSAL SERVICES SITE
WALLER COUNTY, TEXAS

June 14, 1989 W.O. #91-22

This document presents proposed limits for air emissions from remedial action activity at the Sheridan site. It was prepared for the Sheridan Site Committee (SSC) by ERM-Southwest to provide EPA a rationale for the SSC position on this issue.

Background

The EPA has proposed the use of the TACB "Effects Screening Levels" at the property line as the limit for air emissions during remedial action activities. The Effects Screening Level is inappropriate for monitoring remedial action air emissions off-site for the following reasons:

- It is a very conservative screening standard to identify emissions for further regulatory analysis.
- It is a 30-minute standard, and it is unlikely that representative sampling can occur in such a narrow time frame. Effect Screening levels are also presented as an annual average value for evaluating chronic toxicity, but chronic toxicity is based on lifetime exposure and has no practical meaning for a three-year remediation effort.
- There are few receptors off-site of this remote location. (The nearest resident is Mr. Sheridan's home, over one and one-quarter mile from the south [closest] corner of the main pond.) The Effects Screening Levels do not account for low populations at risk.
- There are no other significant sources of air emissions. Standards such as the Effects Screening Levels are conservative in part because they assume an industrial setting where emissions come from many sources simultaneously.
- Effects Screening Levels are generally based on data concerning health effects, but are also based on data relating to odor nuisance potential, vegetation effects or corrosion effects.

L590

- Effects Screen Levels have been developed and refined for the review of plans to construct or modify production facilities. They recognize neither the short-term nature of emissions resulting from excavation and treatment, nor the following significant and permanent benefit to the environment. Further, they presume the existence of the range of effective emissions control technologies available for industrial production activities, but the choices are necessarily more limited and less effective for site remediation.

The health effects data used in setting some Effects Screening Levels are based on the most appropriate TLVs (threshold limit value) or workplace standards, and a fraction of TLVs are herein proposed as a suitable basis for protecting off-site human receptors.

TLVs are found in "Threshold Limit Values for Chemical Substances and Physical Agents" which is published annually by the American Conference of Governmental Industrial Hygienists (ACGIH). The ACGIH defines three categories of TLVs: (1) 8-hour workday, 40-hour workweek time-weighted average (TWA) used as an exposure guide rather than a limit, (2) 15-minute time-weighted average short-term exposure limit (STEL), and (3) ceiling not to be exceeded even instantaneously.

One percent of the TLV is proposed as a standard to be applied to the nearest residence, which is the Sheridan house. So long as air emissions are controlled such that no pollutant exceeds one percent of the TLV for that compound at that location, off-site human health will be fully protected. Table 1 presents the TLV-TWAs for the Sheridan site indicator chemicals selected in the November 1, 1988 Baseline Risk Assessment.

Modeling

Modeling is used herein to determine what emissions concentration limits at the site perimeter ("site fenceline") would assure that concentrations nearest the residence did not exceed 0.01 times TLVs. Texas Episodic Model (TEM) version 8AB dispersion modeling used a full year of sequential 1-hour meteorological data, 24-hour averaging, a rural setting, and an arbitrary pollutant and emission rate (benzene, 0.1 g/sec.). Two cases were run using these parameters to model the effects of a low-level emission point source within the main pond. A coarse grid (200-meter centers between grid points) was used to predict what the worst-day pollutant concentration would be at the Sheridan house, and a fine grid (50-meter centers) was used to predict worst-day concentrations along the site fenceline around the site in the direction of

L592

TABLE 1

Threshold Limit Values

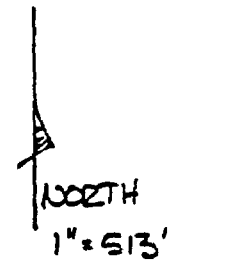
Parameters	TLV-TWA
units	ug/m3
Benzene	32,000
2,4-Dimethylphenol	
Ethylbenzene	434,000
Naphthalene	52,000
Phenol	19,000
Tetrachloroethylene	339,000
Toluene	377,000
Trichloroethylene	269,000
Metals and PCBs as dust:	
Chromium	5,000
Lead	150
Nickel	1,000
Zinc	5,000 (a)
	1,000 (b)
	10,000 (c)
PCBs	500

NOTES:

(a) As zinc oxide fume
(b) As zinc chloride fume
(c) As zinc oxide dust

COMPLETE GRID SUMMARY -- MAXIMUM VALUES CALCULATED AT ALL POINTS AVERAGING TIME = 24 -HOURS POLLUTANT 1, SE
UNCALIBRATED CONCENTRATIONS - MICROGRAMS PER CUBIC METER

	-.35	-.25	-.15	-.05	.05	.15	.25	.35
.35	4 10	5 17	12 11	13 14	12 9	10 6	3 5	3
.30	10 6	12 10	13 23	19 17	16 19	5 5	7 4	5
.25	7 13	8 15	25 27	22 21	19 22	9 8	5 7	5
.20	13 10	15 11	14 22	20 27	16 10	8 7	8 6	7
.15	9 10	19 18	18 24	44 34	39 13	11 11	11 7	5
.10	7 17	20 18	25 30	38 45	24 18	18 12	9 9	5
.05	7 11	12 14	30 33	47 35	27 29	20 11	14 13	9
.00	19 23	28 34	40 35	27 0	41 42	40 35	29 24	20
-.05	13 19	21 13	25 47	32 44	34 29	36 11	12 11	8
-.10	6 12	15 31	40 22	23 52	28 22	17 14	23 20	8
-.15	7 18	38 17	14 13	34 44	31 13	12 10	12 8	10
-.20	25 17	17 9	15 10	17 34	18 12	11 8	10 6	8
-.25	8 14	7 16	9 20	22 26	17 16	12 4	6 8	4
-.30	11 5	14 5	6 17	19 21	14 13	7 5	12 4	6
-.35	4 11	5 6	9 7	13 17	10 8	7 9	5 9	3
	-.35	-.25	-.15	-.05	.05	.15	.25	.35



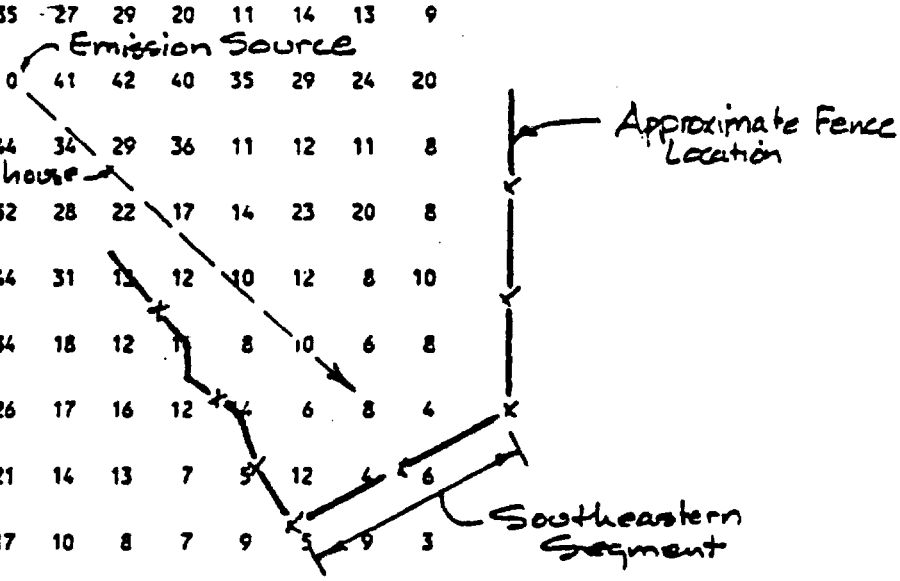


Figure 1- Model Results, Fine Grid

the house. The highest one-day concentration predicted at the Sheridan house as a result of a 0.1 g/sec emission rate was 0.35 ug/m^3. The corresponding results of the fine grid case are shown in Figure 1 with the site fenceline superimposed on the data. The highest one-day concentration predicted at the site fenceline as a result of a 0.1 g/sec emission rate is 4 ug/m^3 at the nominal southeast corner of the site fenceline.

It should be noted that both of these modeled concentrations occurred under "F" stability conditions (straight winds) when the least amount of dispersion would occur between the site fenceline and the house. These essentially all occurred at night. If activities which cause emissions occur mostly during the working day (when "F" stability is unlikely) then a considerable additional factor of safety exists beyond that established by the modeled values.

The Sheridan house occupants will be fully protected if the concentration of pollutants of concern at the southeast site fenceline does not exceed 0.11 times the TLVs for those compounds. This factor of 0.11 was derived by assuming the ratio of the concentration limit at the fence to concentration limit at the house equals the ratio of the modeled concentrations at those locations, as follows:

$$\frac{C_{Limit}}{0.01\ C_{TLV}} = \frac{C_{Fence}}{C_{House}} = \frac{4.0\ ug/m^3}{0.35\ ug/m^3}$$

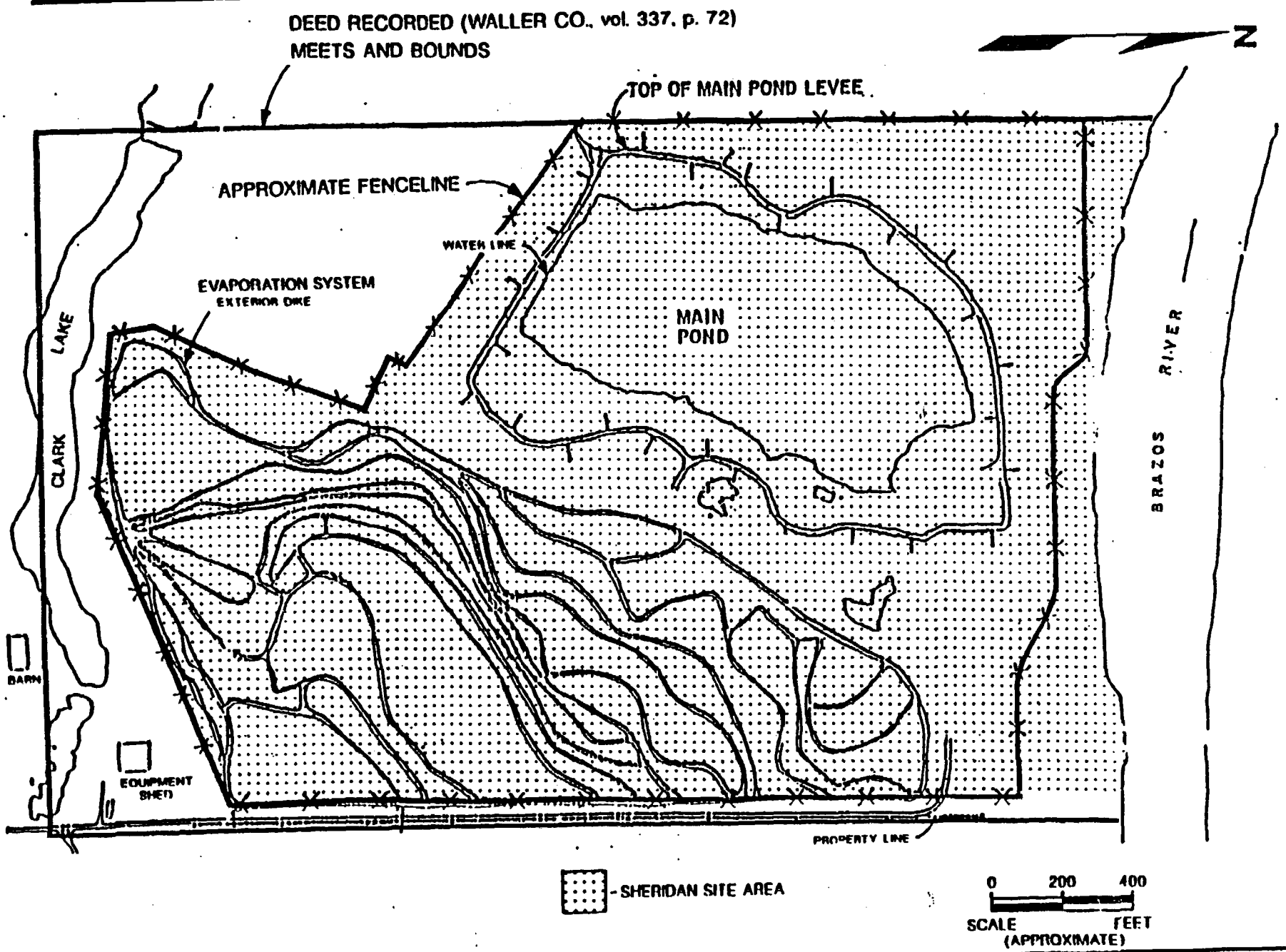
$$C_{Limit} = 0.11\ C_{TLV}$$

If, for example, benzene proves to be a pollutant of concern, then the 24-hour limit at the southeast site fenceline would be 0.11 x 32,000 ug/m^3 = 3,520 ug/m^3. So long as concentrations measured at that corner of the site fenceline are below 3,520 ug/m^3 of benzene, the Sheridan house occupants would be fully protected from potentially harmful levels of benzene.

Proposed Limits

It is proposed that 0.11 times TLVs be set as the site fenceline limit for emissions at the southeastern segment of the site fenceline during construction for the indicator parameters selected. The TLVs used will be the TLV-TWA values presented in

Section 6 of the November 1, 1988 Baseline Risk Assessment. Measurements will be based on 24-hour air samples, taken along the southeastern segment of the site fenceline shown in Figure 1. The limit of 0.11 times TLVs is a very conservative screening standard because of the rural setting of the site and short (2-3 years) duration of the site remediation. Modeling does not recognize that most emissions would occur during daylight working hours when wind dispersion is most significant.



ERM-Southwest, inc.
NEW ORLEANS, LOUISIANA HOUSTON, TEXAS

ATTACHMENT E

SHERIDAN SITE

ATTACHMENT F

PLAN TO RESTORE NATURAL RESOURCES
UNDER THE TRUSTEESHIP OF THE
DEPARTMENT OF THE INTERIOR
AT THE SHERIDAN NPL SITE,
WALLER COUNTY, TEXAS

I. Wetland Habitat Mitigation Plan

A. Purpose. This Attachment to the Sheridan Site Consent Decree is a Wetland Habitat Mitigation Plan, the purpose of which is to provide for replacement of natural resources injured, destroyed, or lost as a result of releases of hazardous substances at or from the Sheridan Disposal Services Site and to settle all claims of the United States and all Defendants' liability for damages for injury to, destruction of, or loss of natural resources which arise under Section 107 of CERCLA, 42 U.S.C. § 9607.

B. Wetlands Habitat Project. The Settlors, represented by the Sheridan Site Trust (SST), shall undertake the Wetland Habitat Project (Project) described in this Attachment to the Sheridan Site Consent Decree in settlement of all claims of the United States against the Settlors for damages for injury to, destruction of, or loss of natural resources for which the Secretary of the Interior is Trustee, as a result of releases of hazardous substances at or from the Sheridan Disposal Services Site.

C. Project Management Group. Not later than twelve (12) months after the effective date of the Consent Decree, a Project Management Group (PMG) shall be established consisting of three (3) members--one (1) member from the Settlors, one (1) member from the Department of the Interior, and one (1) member from the State of Texas Natural Resources Trustee. Responsibilities of the PMG shall include but are not limited to approval of the Wetland Habitat Plan, oversight of the Plan and inspections of the Wetlands Habitat Project throughout the thirty (30) year management period or a shorter period if the PMG deems necessary.

D. Wetland Habitat. The SST will develop, in addition to any deep ponds; a seven to ten acre, shallow, graded impoundment contiguous with the borrow area on the Sheridan Site property. The impoundment will be made inaccessible to the public. The SST will provide twenty-five predator proof waterfowl nesting boxes to be placed on the site at the discretion of the PMG. The SST shall submit a Wetland Habitat Plan to the PMG for PMG approval not later than twelve (12) months from the date the Remedial Action 60% Design Phase is submitted to EPA. The PMG will review the Wetland Habitat Plan and submit within sixty (60) working days its acceptance of the Plan to the SST, or a revision of the Plan acceptable to the PMG for review by the SST. Final acceptance of a Wetland Habitat Plan is to be made by the SST not later than twelve (12) months after the initial plan is received by the PMG. The Wetland Habitat Project shall be completed not later than the completion date of the Sheridan Site cleanup.

E. Wetland Habitat Site Selection. The SST may propose in the Wetland Habitat Plan the location and acreage of the Wetland Habitat subject to PMG approval. If the proposed location and acreage of the site is unacceptable to the PMG, the PMG shall identify to the SST, approximately three acceptable locations and acreages from the Wetland Habitat Project. The SST shall have the final right of selection among the various Wetland Habitat locations and acreages proposed by the PMG.

F. Wetland Habitat Water Supply. The borrow area and the contiguous impoundment shall be designed and constructed to fill with water from natural drainage at the Sheridan Site. Rainfall and runoff shall provide the only sources of water.

G. Wetland Habitat Maintenance. The SST will provide for all maintenance expenses, maintenance, and managmenet of the Habitat for thirty (30) years from the date the PMG determines that construction of the Wetland Habitat is completed. If the PMG determines that the Wetland habitat is in need of maintenance the group shall present to the SST, a written request specifically describing the necessary maintenance. The SST shall provide the requested maintenance within 60 days of the PMG request.

H. Response Cost Reimbursement. All natural resources response cost reimbursement shall be made in accordance with Section XX, paragraph B, of the Sheridan Site Consent Decree

except that the mailing address of the Office of Environment Project Review should be changed to: Office of Environmental Project Review, Room 2340 (PEP), 18th and C Streets, N.W., Washington, D.C. 20240.

I. Indemnification. Settlors shall indemnify, save and hold harmless the United States from any and all claims, causes of action or liabilities arising from the negligent acts or omissions or willful misconduct of Settlors in implementing this Wetland Habitat Mitigation Plan.

J. Dispute Resolution. The dispute resolution provisions in Section XXVII of the Sheridan Site Consent Decree may be invoked to resolve disputes arising under this Wetland Habitat Mitigation Plan.

K. Stipulated Penalties. The Settlors shall pay stipulated penalties for failure to comply with the requirements of this Wetland Habitat Mitigation Plan as follows:

1. For Failure to timely and continuously provide a Settlors' representative member to the PMG throughout the thirty-year management period pursuant to Section C of this Wetland Habitat Mitigation Plan, the Settlors shall pay a stipulated penalty of $100 per day.

L. Public Comment. This Wetland Habitat Mitigation Plan and the Wetland Habitat Project described herein, are subject to the public comment requirements of CERCLA Section 122, 42 U.S.C. 9623.

2. For Failure of the SST to timely submit or resubmit the Wetland Habitat Plan pursuant to Section D of this Wetland Habitat Mitigation Plan, the Settlors shall pay a stipulated penalty of $1,000 per day.

3. For Failure to timely comply with the Schedule for completion of the Wetland Habitat Project pursuant to Section D of this Wetland Habitat Mitigation Plan, the Settlors shall pay a stipulated penalty of $1,000 per day.

4. For Failure to timely comply with any maintenance requests made by the PMG pursuant to Section G of the Wetland Habitat Mitigation Plan, the Settlors shall pay a stipulated penalty of $200 per day.

5. For Failure to timely pay response costs pursuant to Section H of this Wetland Habitat Mitigation Plan, Settlors shall pay a stipulated penalty of $3,000 per day.

Stipulated penalties shall be paid in the same manner as provided in Section H of this Wetland Habitat Mitigation Plan and shall be paid by the 15th day of the month following the month in which the violation occurred.

United States Department of the Interior

OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

In Response To:
90-11-2-445
In Reply Refer To:
FWS.CW.S033

JAN 18 1990

Mr. W. George Van Cleve
Deputy Assistant Attorney General
Land and Natural Resources Division
Department of Justice
Washington, D.C. 20530

Re: Sheridan Disposal Services Site, City of Hempstead, Waller County, Texas

Dear Mr. Van Cleve:

The Department has received your letter dated November 21, 1989, requesting the Department of the Interior (DOI) to authorize the Department of Justice to enter into a covenant not to sue with certain settling parties for damages under section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. § 9607(a), for natural resources under our trusteeship in the above-mentioned site. It is our understanding that the United States has been involved in negotiations with the Sheridan Site Committee (the Settlors), which represents approximately two thirds of the Potentially Responsible Parties, concerning the cleanup of this site.

We understand that, in the proposed consent decree, the Settlors have agreed to: 1) pay $20,000 to DOI and 2) implement the Wetland Habitat Mitigation Plan set forth in the Attachment F of the consent decree, the final version of which is herein enclosed. In light of these agreements, and the EPA-monitored cleanup which the Settlors will also undertake, we authorize the Department of Justice to include in the settlement agreement a covenant not to sue for damages for injury to natural resources under our trusteeship at or near the site.

This consent is provided based upon our understanding that such a covenant would be subject to the "reopeners" for unknown conditions and subsequent information that are typically included in CERCLA covenants not to sue under EPA guidance. It is also our understanding that the Department of Justice and EPA have concluded that the non-settling parties remain subject to full liability for injury to our trustee resources.

Our decision is an appropriate exercise of the Department of the Interior's responsibilities as a natural resources trustee under section 122(j) of CERCLA, as amended, and Executive Order 12580. Therefore, in accordance with Executive Order 12580 and section 122(j) of CERCLA, we hereby authorize the Department of Justice to act on our behalf as stated. So that our files may be complete on this litigation, we would appreciate it if your office would send us a copy of the final consent decree. Should you have any questions or comments, please contact Caroline DiBona at 343-2172.

Sincerely,

Martin J. Suuberg
Associate Solicitor
Conservation and Wildlife

Enclosure

cc: Director, OEA
Director, FWS, Office of Environmental Contaminants
Southwest Regional Solicitor
Susan Ehlen, Southwest Regional Office of Solicitor
Pam Phillips, U.S. EPA, 1445 Ross Avenue, Dallas, TX 75202
Beverlee J. Destein, DOJ

APPENDIX D

TEXAS WATER COMMISSION

B. J. Wynne, III, Chairman
Paul Hopkins, Commissioner
John O. Houchins, Commissioner

Allen Beinke, Executive Director
Michael E. Field, General Counsel
Brenda W. Foster, Chief Clerk

December 27, 1988

Allyn M. Davis Ph.D., Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency
Region VI
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Sheridan Disposal Services Superfund Site
Record of Decision

Dear Dr. Davis:

We have reviewed the proposed Record of Decision (ROD) for the Sheridan Disposal Services Superfund Site. We have no objection to the selected remedy as described in the draft ROD attached to your letter of December 16, 1988. The selected remedy requires the use of biotreatment followed by stabilization and capping of residuals.

Sincerely,

Allen Beinke

Allen P. Beinke
Executive Director

In the second referenced paper, Alther, Evans and Pancoski (1988), the authors did not evaluate the effectiveness of stabilizing mixed wastes such as those at Sheridan, but performed a Free Swell Test using individual organic compounds. The Free Swell Test was essentially a volume change observation from applying a particular treatment. Results were used to infer the degree of sorption of the compound. However, the treated materials were not tested for leachability to verify the degree of sorption.

Finally, the conclusions of the second paper, which references the first paper provided by the commenter, states that some "preliminary success in stabilizing organic hazardous wastes with organically modified clays has been achieved in the laboratory, but further analysis is necessary." This limited success in the laborotory using dissimiliar materials to those at Sheridan cannot be extrapolated to be indicative of the long-term protection of human health and the environment at the Sheridan site.

TEXAS AIR CONTROL BOARD

6330 HWY. 290 EAST
AUSTIN, TEXAS 78723
512/451-5711

DICK WHITTINGTON, P.E.
Chairman

BOB G. BAILEY
Vice Chairman

ALLEN ELI BELL
Executive Director

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HUBERT OXFORD, III
WILLIAM H. QUORTRUP
C. H. RIVERS
MARY ANNE WYATT

July 3, 1989

Mr. Robert T. Stewart
Jones, Day, Reavis & Pogue
301 Congress Avenue
Suite 1200
Austin, Texas 78701

Dear Mr. Stewart:

This is to confirm our telephone conversation of June 30, 1989. We talked about the approach for limits on emissions from the cleanup of the Sheridan Disposal Services site at a rural site in Waller County, Texas.

In a meeting held at TACB offices, on June 19, 1989, you informed me that this cleanup is scheduled to be completed within two to three years of when it is started. You had proposed that short-term impacts of all air contaminants be limited to the current effects screening level at the nearest house, which is Mr. Sheridan's residence. Under these conditions, impacts at the site fenceline would be approximately 11 times the screening levels, and you had requested our opinion on such an approach. I requested modeling on annual impacts at that meeting.

The annual modeling showed that when annual average screening levels were met at Mr. Sheridan's house, fenceline exceedances of 13 times the effects screening level would occur. Given the uncertainties in doing these sorts of calculations, it is my opinion that this is not significantly different from the 11-fold factor obtained from the short-term modeling.