UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

EPA Region 5 Records Ctr.
257463

JUN 23 2000

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Obear-Nester Glass Co.
c/o The Corporation Co,
Inc., Resident Agent
1st National Bank Bldg.
Topeka, KS 66603

Re: **SPECIAL NOTICE OF LIABILITY**
Sauget Area 2 Site
Sauget/Cahokia, Illinois

Dear Sir or Madam:

The United States Environmental Protection Agency (U.S. EPA) has undertaken response actions at the Sauget Area 2 Site (the Site, see map appended to Attachment D) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. Section 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499 (CERCLA). These actions, which include extensive sampling in and around the Site and the consolidation and capping of wastes found at Sauget Area 2 Site Q, have documented the release or threatened release of hazardous substances, pollutants, and contaminants at the Site. A document referencing the sampling activities and studies which have taken place in Sauget Area 2 Site is referenced in Attachment A. Specific findings from certain of these studies concerning the Site are presented in the proposed Administrative Order on Consent appended hereto as Attachment D.

Additional Response Actions

Unless U.S. EPA determines that a potentially responsible party (PRP) will voluntarily undertake the response action necessary at the Site, U.S. EPA may, under Section 104 of CERCLA, undertake the response action itself and, under Section 107 of CERCLA, seek reimbursement from PRPs of all costs incurred in connection with the action taken. Such costs may include, but are not limited to, expenditures for investigation, planning, response and enforcement activities. Moreover, under Section 106 of CERCLA, U.S. EPA may order responsible parties to implement relief actions deemed necessary by U.S. EPA to protect the public health, welfare or environment from an

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imminent and substantial endangerment because of an actual or threatened release of a hazardous substance from a Facility.

In addition to those further response actions enumerated above, U.S. EPA may, pursuant to its authorities under CERCLA and other laws, determine that other clean-up activities are necessary to protect public health, welfare and the environment.

PRP Determination

Potentially responsible parties (PRPs) under Section 107 of CERCLA include current owners and operators of the Site and former owners and operators of the Site at the time of disposal of hazardous substances, as well as persons who owned or possessed hazardous substances and arranged for disposal, treatment, or transportation of such hazardous substances and persons who accepted hazardous substances for transportation for disposal or treatment to a facility selected by such transporter. U.S. EPA has information indicating that you are a PRP with respect to the Site. A general description of the sources of information regarding PRPs at the Site is provided in Paragraph 1 of Attachment A to this letter. By this letter, U.S. EPA notifies you of your potential liability with regard to this matter and encourages you, as a PRP, to reimburse U.S. EPA for its costs incurred to date and to voluntarily perform or finance the response activities that the U.S. EPA has determined or will determine are required at the Site.

Special Notice and Negotiation

Pursuant to Section 122(e)(1) of CERCLA, U.S. EPA has determined that a period of negotiation may facilitate an agreement between the Sauget Area 2 PRPs and U.S. EPA for implementation or financing of the response action. Accordingly, U.S. EPA is contacting PRPs identified for the Sauget Area 2 Site to resolve their liability with respect to the Site. To assist the PRPs in negotiating with U.S. EPA concerning this matter, attached to this letter is a list of the names and addresses of other PRPs to whom this notification is being sent. It should be noted that inclusion on or exclusion from this list does not constitute a final determination by U.S. EPA concerning the liability of any party for remediation of the Site or for payment of past costs.

Upon your receipt of this Special Notice, you will have a maximum of 60 days to coordinate with any PRPs and to present to U.S. EPA a "good faith offer" to conduct and/or finance the remedial investigation to negotiate the terms of an administrative order on consent. In accordance with the requirements of Section 122(e)(2), during this 60-day

moratorium, U.S. EPA will not commence remedial action at the Site. U.S. EPA may, however, commence any additional studies or investigations authorized under Section 104(b), and take any action at the Site should a significant threat to human health or the environment arise during the negotiation period.

Good Faith Offer

A "good faith offer" as referenced above shall include the following:

* a statement of the PRPs' willingness to conduct or finance a Remedial Investigation and Feasibility Study (RI/FS) which are consistent with the proposed AOC and Statement of Work (SOW) and which provides a sufficient basis for further negotiations in light of U.S. EPA's SOW;

* a detailed response to, and detailed comments, if any, on, the attached proposed AOC and SOW. If your offer contemplates modifications to the AOC or SOW, please make revisions or edits to the enclosed draft and submit a version to U.S. EPA showing any such modifications. Your response should provide reasons for or the basis of major revisions to the attached proposal;

* a demonstration of the PRPs' technical capability to undertake the RI/FS. This includes that the PRPs identify the firm expected to conduct the work, or that the PRPs identify the process they will undertake to select a firm;

* a demonstration of the PRPs' capability to finance the RI/FS;

* a statement of the PRPs' willingness to reimburse U.S. EPA for past response and oversight costs; and

* the name, address, and phone number of the party or steering committee who will represent the PRPs in negotiations.

If U.S. EPA receives from the Sauget Area 2 PRPs within the 60 day calendar period a written "good faith offer" which demonstrates the PRPs' qualifications and willingness to conduct or finance the RI/FS consistent with the attached AOC and SOW, U.S. EPA may extend its moratorium on commencement of the response action work up to an additional 30 calendar days. The purpose of this additional time is to allow the PRPs and U.S. EPA a period of time to finalize the settlement.

If a "good faith" proposal is not received within the initial 60-day moratorium, U.S. EPA, pursuant to Section 122(e)(4), may

proceed to immediately undertake such further action as is authorized by law, utilizing public funds available to the Agency.

Demand for Costs Incurred

As mentioned above, in accordance with CERCLA and other authorities, U.S. EPA has already undertaken certain actions and incurred certain costs in response to conditions at the Site. Certain of these response actions are listed in the document referenced in Paragraph 2 of Attachment A to this letter. As soon as practicable, U.S. EPA will send Respondent(s) a bill for "past response costs" at the Site. U.S. EPA's bill will include an Itemized Cost Summary. "Past response costs" are all costs, including, but not limited to, direct and indirect costs and interest, that the United States, its employees, agents, contractors, consultants, and other authorized representatives incurred and paid with regard to the Site prior to September, 1998. The Agency anticipates expending additional funds for response activities at the Site under the authority of CERCLA and other laws. In accordance with Section 107(a) of CERCLA, demand is also hereby made under these authorities for payment of all future costs that U.S. EPA may accrue in regard to the Site.

PRP List

As stated above, the attached list of the names and addresses of any other PRPs to whom this notification is being sent is provided to assist you in contacting other PRPs in this matter and to negotiate with U.S. EPA. This list is appended as Attachment B to this letter. Information regarding a ranking by volume and nature of substances contributed by each PRP, as contemplated by Section 122(e)(4)(A), is not available at this time. However, the AOC attached hereto as Attachment D sets forth the areas within the Sauget Area 2 Site with which based on available information it is thought each PRP is associated.

Initial Conference

To further facilitate your and any other PRPs' ability to present a "good faith offer" within the 60-day time limit, an initial settlement conference will be held. An agenda indicating the topics for discussion is appended as Attachment C. A draft AOC and a SOW is enclosed as Attachment D.

90 Day Deadline

Except in extraordinary circumstances explained in a written request, no extension to the second 30 day moratorium period

will be granted by U.S. EPA. As stated above, if no agreement can be reached, pursuant to Section 122(e)(4), U.S. EPA may immediately proceed to undertake such further action as authorized by law to conduct a RI/FS at the Site.

U.S. EPA Notification

As a potentially responsible party, you should notify U.S. EPA in writing within 10 days of receipt of this letter of your willingness to participate in negotiations to perform or finance the activities described above. If U.S. EPA does not receive a timely response, U.S. EPA will assume that you do not wish to negotiate a resolution of your potential responsibility in connection with the Site and that you have declined any involvement in performing the response activities.

The response should indicate the appropriate names, addresses including e-mail addresses, and telephone numbers for further contact with you. If you are already involved in discussions with state or local authorities, engaged in voluntary clean-up action or involved in a lawsuit regarding this Site, you should continue such activities as you see fit. This letter is not intended to advise or direct you to restrict or discontinue any such activities; however, you are advised to report the status of those discussions or actions in the response to this letter and to provide a copy of the response to any other parties involved in those discussions or actions. The response letter should be sent to:

G. Marie Watts (SR-6J)
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

-and-

Mike McAteer (SR-6J)
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

-and-

Thomas J. Martin (C-14J)
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, Illinois 60604

Natural Resource Trustee Notification

By a copy of this letter, U.S. EPA is notifying the State of Illinois and the Natural Resources Trustees, in accordance with Section 122(j) of CERCLA, of its intent to enter into negotiations concerning the conduct of an RI/FS at the Site, and is also encouraging them to consider participation in such negotiations.

Further Information

If you need further information regarding this letter, you may contact Mike McAteer of the Remedial and Enforcement Response Branch at (312) 886-4663. If you have an attorney handling your legal matters, please direct his or her questions to Thomas Martin of the Office of Regional Counsel, U.S. EPA, Region 5, at (312) 886-4273.

We hope that you will give this matter your immediate attention.

Sincerely yours,

Wendy L. Carney, Chief
Remedial Response Branch #1

Enclosures

cc: Thomas V. Skinner, Director
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Brent Manning, Director
Illinois Department of Natural Resources
524 S. 2nd Street
Springfield, IL 62701-9225

Thomas Davis
Office of State Attorney General
500 South 2nd Street
Springfield, IL 62706-1771

ATTACHMENT A

1. The U.S. EPA has evaluated a large body of information and evidence in connection with its investigation of the Site, including:

a. Items/Solid Waste/Drums/Waste Material Located Within Sauget Area 2 Site Q
b. Site Q On-Scene Coordinator's Reports
c. Village of Sauget Treatment Works Total Plant Loadings Forms
d. U.S. EPA/IEPA/Monsanto Sample Results
e. Title Searches
f. Memos Regarding Toxic Waste Disposal Practices in Area
g. CERCLA Section 104(e) Responses
h. CERCLA Section 103(c) Notices
i. Sampling Results for Sauget Area Two Sites R and O
j. Municipal and Industrial Sewer Maps
k. Cerro Copper Products Company v. Monsanto Corporation, Docket No. 92-CV-204, Deposition Transcripts
l. Affidavits of former area employees
m. Sauget & Company Invoices

Based on the above, the U.S. EPA has information indicating that you are a potentially responsible party with respect to this Site. Specifically, the U.S. EPA has reason to believe that you are the owner/operator of the facility, or a former owner/operator of the facility at the time of disposal of hazardous substances at the facility.

2. The U.S. EPA and/or IEPA have conducted sampling/studies at the Site, all summarized in the following data compilation:

a. Sauget Area One and Two Sites, St. Clair County, Illinois, Volume Two: Area Two Data Tables/Maps (Ecology and Environment, February 1998)

3. Response costs associated with the Site have been incurred by the U.S. EPA. The total U.S. EPA cost incurred for the above referenced studies and activities is currently being determined.

POTENTIALLY RESPONSIBLE PARTIES

Note: inclusion on or exclusion from the list does not constitute a final determination by the Agency concerning the liability of any party for remediation of Site conditions or payment of past costs.

Owner/Operator

Site O

A-1 Oil Corporation
1 Mobile Street
Sauget, Illinois 62201

Alton & Southern RR
1000 South 22nd St,
East St. Louis, IL 62207-1943

Alton & Southern RR
Registered Agent:
CT Corporation
906 Olive Street
St. Louis, MO 63103

AMAX Zinc Corporation
Registered Agent:
CT Corp.
906 Olive St.
St. Louis, MO 63101

Jerry Russell Bliss, Inc.
149 Strecker Road
Ballwin, Missouri 63011-1905

Clayton Chemical Company
Division of Emerald Environmental
No. 1 Mobile Avenue
Sauget, Illinois 62201

Clayton Chemical Co. Division of
Emerald Environmental
Registered Agent:
CT. Corp.
906 Olive St.
St. Louis, MO 63101

Midwest Rubber Reclaiming
Division of Empire Chem, Inc.
Registered Agent:
CT Corp.
208 South LaSalle St.
Chicago, IL 60604

Sauget Sanitary Development
And Research Assn.
10 Mobile Street
Sauget, Illinois 62201

Village of Sauget
2897 Falling Springs Road
Sauget, Illinois 62206

Solutia, Inc.
Attn: D. Michael Light
10300 Olive Blvd.
P.O. Box 66760
St. Louis, MO 63166-6760

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

Mobil Corporation
Superfund Response Group
3225 Gallows Road
Fairfax, Virginia 22037-0001

Big River Zinc Corporation
32 Loockerman Square
Dover, Delaware 19901

Site P

Cahokia Trust Properties
135 North Meramac Avenue
St. Louis, Missouri 63105

Chicago Title & Trust
171 North Clark St.
9th Floor
Chicago, IL 60601

City of East St. Louis
301 Riverpark Drive
East St. Louis, MO 62201

Metro East Sanitary District
1800 Edison Ave,
Granite City, IL 62040-4609

Norfolk Southern Corp.
720 Olive St # 2850,
St Louis, MO 63101

SI Enterprises L.P.
c/o Eugene P. Slay
400 Mansion House Center
Apt. 2210
St. Louis, Missouri 63102-2608

Southern Railway Systems
540 Sharon Lane
Alexandria, LA 71303

Union Electric Company
400 Broadway St.
Cape Girardeau, MO 63701-5622

Gulf-Mobile & Ohio Railroad
c/o Illinois Central and Gulf Railroad
1700 S. 20th St.
East St. Louis, IL 62206

Magna Trust Company
1401 Mississippi Avenue
East St. Louis, IL 62201

Site Q

Alton & Southern RR
1000 South 22nd St
East St. Louis, IL 62207-1943

Con Agra, Inc.
1 Con Agra Drive
Omaha, Nebraska 85012

Eagle Marine Industries, Inc.
200 North Broadway
St. Louis, MO 63102-2730

Notre Dame Fleeting
& Towing Service Inc.
Registered Agent
Richard D. Burke
200 South Broadway
Suite 1725
St. Louis, Missouri 63102

Patgood (Illinois), Inc.
Registered Agent:
CT Corporation System
208 South LaSalle Street
Chicago, Illinois 60604

Peavey Company
c/o Prentice-Hall Corp System
3636 North Central Avenue
Phoenix, Arizona 85012

Phillips Pipe Line Co
Phillips Petroleum Co
Corporate Office
1250 Adams Bldg,
Bartlesville, OK 74004-0001

Pillsbury Company
608 Second Avenue
Minneapolis, Minnesota 55402
Norfolk Southern Corp.
720 Olive St #2850,
St Louis, MO 63101

Riverport Terminal
And Fleeting Company
Suite 1725
200 North Broadway
St. Louis, Missouri 63102-2716

Sauget & Co.
c/o Paul Sauget
2700 Falling Springs Road
Sauget, IL 62201

St. Louis Grain Company
113 E. Main Boulevard
East St. Louis, IL 62201

Union Electric
400 Broadway St.
Cape Girardeau, MO 63701-5622

Village of Sauget
2897 Falling Springs Road
Sauget, Illinois 62206

Village of Cahokia
201 West Fourth Street
Cahokia, IL 62206

Site R

Solutia, Inc.
Attn: D. Michael Light
10300 Olive Blvd.
P.O. Box 66760
St. Louis, MO 63166-6760

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

Site S

Chemical Waste Management
3003 Butterfield Rd.
Oak Brook, IL 60521

Norfolk Southern Corp.
720 Olive St. #2850
St Louis, MO 63101

Village of Sauget
2897 Falling Springs Road
Sauget, Illinois 62206

Solutia, Inc.
Attn: D. Michael Light
10300 Olive Blvd.
P.O. Box 66760
St. Louis, MO 63166-6760

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

II. Transporters

Non Site-Specific:

Rogers Cartage Company
9150 Damen Avenue
Chicago, IL 60620

Browning Ferris Industries, Inc.
Gerald K. Burger, V.P. - Secretary
P.O. Box 3151
Houston, TX 77253

Browning Ferris Industries of St. Louis, Inc.
11506 Bowling Green
Creve Coeur, MO 63141

C&E Hauling Company (BFI)
1603 Fannin Bank Bldg.
Houston, TX 77253
Registered Agent
CT Corporation
3225 North Central Ave.
Phoenix, AZ 85012

Hilltop Hauling, Inc. (BFI)
Register Agent
CT Corporation Systems
208 South LaSalle Street
Chicago, IL 60604

III. Generators

Site O:

AMAX Zinc Corporation
Registered Agent:
CT Corp.
906 Olive St.
St. Louis, MO 631012

Blue Tee Corporation
224 South Michigan Avenue
Chicago, Illinois 60604-2505

Clayton Chemical Co. Division of
Emerald Environmental
Registered Agent:
CT. Corp.
906 Olive St.
St. Louis, MO 63101

Ethyl Corporation
Ethyl Tower
481 Florida
Baton Rouge, LA 70801

Ethyl Petroleum Additives
Ann Burk, Assistant Counsel
300 South Fourth St.
Richmond, VA 23219-4304

Midwest Rubber Reclaiming
Division of Empire Chem, Inc.
Registered Agent:
CT Corp.
208 South LaSalle St.
Chicago, IL 60604

Mobil Corporation
Superfund Response Group
3225 Gallows Road
Fairfax, Virginia 22037-0001

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

Weise Planning and Engineering
1200 Queeny Avenue
Sauget, Illinois 62206

Site P:

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

Kerr McGee Chemical Corporation
Kerr McGee Center
Oklahoma City, Oklahoma 73125

Site Q and R:

AALCO Wrecking Company Inc.
901 South 14th Street
St. Louis, Missouri 63103

Abco Trash Service & Equipment Co.
4126 Olive Street
P.O. Box 15061
St. Louis, Missouri 63110

Able Sewer Service
600 Briar Hill
East St. Louis, IL 62206

Ajax Hickman Hauling
3937 North Florissant
St. Louis, Missouri 63107

American Zinc Company
Highway 3 & Monsanto Avenue
Sauget, Illinois 62206

Atlas Service Co.
1901 Converse Avenue
East St. Louis, IL 62207

Banjo Iron Company
3209 Chouteau Avenue
St. Louis, Missouri 63103

Roy Baur
1403 Camp Jackson Blvd.
Cahokia, IL 62206

Becker Iron & Metal Corp.
2201 Gratiot Street
St. Louis, Missouri 63103

Belleville Concrete Cont. Co.
2800 S. Belt West
Belleville, Illinois 62223

Bi-State Parks Airport
1300 Uper Cahokia Road
St. Louis, Missouri 62206

Boyer Sanitation Service
P.O. Box 140
Mascoutah, Illinois 62258

Thomas Byrd
6422 Church Road
E. St. Louis, IL 62207

Cargill Inc.
P.O. Box 682
East St. Louis, IL 62202

Century Electric Company
1806 Pine Street
3711 Market Street
St. Louis, Mo 63110

Circle Packing Co.
319 Winstanley Avenue
East St. Louis, IL 62201

Clayton Chemical Company
10 South Brentwood Blvd.
Clayton, MO 63105

Edwin Cooper Inc.
Registered Agent
C T Corporation System
208 South LaSalle Street
Chicago, Illinois 60604

Corkery Fuel Company
4401 Ridgewood Avenue
St. Louis, MO 63116

Crown Cork & Seal Co., Inc.
9300 Ashton Road
P.O. Box 6208
Philadelphia, PA 19136

Dennis Chemical Co., Inc.
Aaron Dennis, President
2700 Papin St.
St. Louis, MO 63102-3042
David Hauling
P.O. Box 939
Edgemont Station
East St. Louis, IL 62208

Disposal Service Company
Seven North Market Street
St. Louis, MO 63102

Dore Wrecking Company
9914 Calumet
St. Louis, MO 63137

Dotson Dispose All Service
4727 Fletcher Street
St. Louis, MO 63121

Dow Chemical
2301 North Brazosport Bvld.
Freeport, TX 77541

Edgemont Construction
P.O. Box 272
E. St. Louis, IL 62202

Eight & Trendy Metal Company
724 Trendley Avenue
E. St. Louis, IL 62201

Evans Brothers
1201 Dun Road
St. Louis, MO 63138

Finer Metals Company
5900 Manchester Avenue
St. Louis, MO 63110

Fish Disposal
Registered Agent
James Fish
4131 Pennsylvania Avenue
St. Louis, Missouri

Fruin-Colnon Corporation
1706 Olive Street
St, Louis, MO 63103

Gibson Hauling
4431 St Louis Avenue
St. Louis, MO 63115

H.C. Fournie Inc.
2700 S. Belt West
Belleville, ILL 62226

Hilltop Hauling
1313 Lonedell Road
Arnold, MO 63010

Hueffmeir Brothers
11506 Bowling Green Drive
St. Louis, MO 63146

Hunter Packing Company
1214 North 2nd Street
E. St. Louis, IL 62201

Inmont Corporation
BASF Corporation
8 Campus Drive
Parsippany, NJ 07054

Kerr McGee Chemical Corporation
Kerr McGee Center
Oklahoma City, Oklahoma 73125

Lefton Iron & Metal Company
205 South 17th Street
E. St. Louis, IL 62207

Midwest Sanitation
1201 Dunn Road
St. Louis, MO 63138

Mississippi Valley Control
3012Chippwa Street
St. Louis, MO 63118

Trash Men Inc.
4532 Audobon Avenue
E. St. Louis, IL 62204

Mallinckrodt
16305 Swingley Ridge Rd # 200,
Chesterfield, MO 63017

Monsanto Company
R. William Ide III, Counsel
800 North Lindbergh Avenue
St. Louis, MO 63167-0001

Myco-gloss
76 Roland St.
Boston, MA 02129

Obear-Nester Glass Company
c/o Indian Head Inc.
Registered Agent
1st National Bank Building
Topeka, Kansas 66603

State of Illinois
Department of Transportation
9300 St. Clair Avenue
East St. Louis, IL 62208

United Technologies Corporation
d/b/a Inmont Corporation
Irving B. Yoskowitz, Counsel
#1 Financial Plaza #2301
Hartford, CT 06103-2601

U.S. Paint Corp.
31 South 21st Street
St. Louis, MO 63103

Barry Weinmiller Steel Fabrication
Bryan Cripe, Safety & Environmental Administrator
8000 Hall St.
St. Louis, MO 63147

Non Site-Specific:

Site S:

Clayton Chemical Co. Division of
Emerald Environmental
Registered Agent:
CT. Corp.
906 Olive St.
St. Louis, MO 63101

Non Site-Specific:

National Vendors
5661 Natural Bridge Road,
St. Louis, MO 63120

ATTACHMENT C

AGENDA FOR MEETING

Date, Time and Location to be determined.

Topics for discussion:

*Background Information on the Site

*Response Activities to Date

*Liability of Responsible Parties Under CERCLA

*Explanation of Expected PRP Response Activities

*Structure of Consent Decree Negotiations

ATTACHMENT D

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	Docket No.
	)	
SAUGET AREA 2 SITE	)	ADMINISTRATIVE ORDER BY
	)	CONSENT PURSUANT TO
SAUGET AND CAHOKIA, ILLINOIS	)	SECTION 106 OF THE
	)	COMPREHENSIVE
	)	ENVIRONMENTAL RESPONSE,
Respondent(s):	)	COMPENSATION, AND
	)	LIABILITY ACT OF 1980,
See Attachment A	)	as amended, 42 U.S.C.
	)	§ 9606(a)
	)	

I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order by Consent ("the Order") is entered voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and the Respondent(s). The Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9604, 9606(a), 9607 and 9622. This authority has been delegated to the Administrator of the U.S. EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

This Order requires the Respondent(s) to conduct a Remedial Investigation and Feasibility Study (RI/FS) for the Site designated as Sauget Area 2 (generally depicted in the figure included in the SOW, attached hereto as Attachment B) located within the Villages of Sauget and Cahokia, St. Clair County, Illinois. Specifically, Respondent(`)s(`) RI/FS shall gather data and evaluate response actions pursuant to 40 CFR Part § 300.430(e), to address the environmental concerns in connection with Sauget Area 2 and the source areas within Area 2, designated as Sites O, P, Q, R and S.

A copy of this Order will also be provided to the State of Illinois, which has been notified of the issuance of this Order pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a). The U.S. EPA has also notified the Federal Natural Resource Trustee of the negotiations in this action pursuant to the requirements of Section 122(j) of CERCLA.

Respondent(')s(') participation in this Order shall not constitute an admission of liability or of U.S. EPA's findings or determinations contained in this Order except in a proceeding to enforce the terms of this Order. Respondent(s) agree to comply with and be bound by the terms of this Order. Respondent(s) further agree that they will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

This Order applies to and is binding upon U.S. EPA, and upon Respondent(s) and Respondent(')s(') heirs, receivers, trustees, successors and assigns. Any change in ownership or corporate status of Respondent(s) including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent(')s(') responsibilities under this Order. Respondent(s) are jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondent(s) with any provision of this Order shall not excuse or justify noncompliance by any other Respondent.

Respondent(s) shall ensure that their contractors, subcontractors, and representatives receive a copy of this Order, and comply with this Order. Respondent(s) shall be responsible for any noncompliance with this Order.

III. FINDINGS OF FACT

Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds, and, for purposes of enforceability of this Order only, the Respondent(s) stipulate that the factual statutory prerequisites under CERCLA necessary for issuance of this Order have been met. U.S. EPA's findings and this stipulation include the following:

1. The source areas for Sauget Area 2 consist of six known disposal areas adjacent, or in close proximity, to the Mississippi River. The six disposal areas are known as Sites O, P, Q, R and S (see figure in attached SOW). The sites are labeled with letter designations for reference purposes only. The fact that source areas have separate letter designations does not necessarily mean that the areas are separate or distinct in terms of contents, ownership, and/or operating history.

   SITE O: Located on Mobil Avenue in Sauget, Illinois, occupies approximately 20 acres of land to the northeast of the American Bottoms Regional Wastewater Treatment Facility (ABRTF). An access road to the ABRTF runs through the middle of the site. Site O consists of four inactive sludge

dewatering lagoons associated with the old Sauget Physical/Chemical Wastewater Treatment Plant. Currently, the lagoons are covered with clay and are vegetated. During their operation the treatment plant and the associated lagoons received and treated industrial waste and municipal wastes. Approximately 10 million gallons per day of wastewater was treated, more than 95% was from area industries. The lagoons operated from approximately 1965 to 1978.

SITE P: Site P occupies approximately 20 acres of land located between the Illinois Central Gulf Railroad and the Terminal Railroad and north of Monsanto Avenue in the Village of Sauget. On information and belief, Site P was operated as a landfill from 1973 to an unknown date in the early 1980's. According to available Illinois EPA records, the landfill accepted "general wastes," including diatomaceous earth filter cake from Edwin Cooper (a/k/a Ethyl Corporation) and non-chemical wastes from Monsanto. Periodic State inspections of Site P also documented that the landfill contained drums labeled: "Monsanto ACL-85, Chlorine Composition," drums of phosphorus pentasulfide from Monsanto and Monsanto ACL filter residues and packaging. Site P is currently inactive and covered and access to the site is unrestricted.

SITE Q: Site Q is a former subsurface/surface disposal area which occupies approximately 90 acres. The site is located in the Villages of Sauget and Cahokia, Illinois, and is bordered by Sauget Site R and the old Union Electric Power Plant on the north; the Illinois Central Gulf Railroad and the United States Corps of Engineers (U.S. COE) flood control levee on the east; and the Mississippi River on the west. U.S. EPA conducted a CERCLA removal action at Site Q in 1995. This removal action involved the excavation of PCBs, organics, metals, and dioxin contaminated soils and drums which had been scoured out of the fill area and were spilling directly into the adjacent waters of the Mississippi River. U.S. EPA recovered its costs for this removal in a subsequent administrative settlement. U.S. EPA conducted a second CERCLA removal action at Site Q beginning in October of 1999 and into early 2000. During this removal action, U.S. EPA has excavated over 2000 drums and over 7,000 cubic yards of contaminated soils containing metals, PCBs, and organics. The Mississippi River has flooded and inundated Site Q and Site R (see below) many times during the last several years. Leachate from the Site has in the past migrated and potentially could continue to migrate into the Mississippi River. Most of Site Q is covered with highly permeable black cinders. Operations for a barge loading facility and construction debris disposal areas now

operate on top of parts of Site Q. Access to this site is also unrestricted.

SITE R: Located on the river side of the flood control levee immediately adjacent to the Mississippi River in Sauget, Illinois and just north and west of parts of Site Q, Site R, also known as the "Sauget Toxic Dump," "Monsanto Landfill," and the "River's Edge Landfill," is a former industrial waste subsurface/surface disposal area owned by Solutia, Inc. Site R was used as a disposal area by owner Monsanto for its industrial and chemical wastes from approximately 1957-1977. Samples taken on Site R revealed high levels of organics, PCBs, metals, and dioxins. The organics present in Site R include chlorobenzenes, chlorophenols and analine derivatives. Leachate from the Site R has in the past migrated and potentially could continue to migrate into the Mississippi River. As noted above, the Mississippi River floods Site R frequently. Access to Site R is restricted by fencing and is monitored by a 24-hour camera. In 1979, Monsanto completed the installation of a clay cover on Site R to cover waste, limit infiltration through the landfill, and prevent direct contact with fill material. The cover's thickness ranges from 2 feet to approximately 8 feet. As constructed, the cover does not provide for permanent containment of the chemical wastes and other contaminants in the landfill. In 1985, Monsanto installed a 2,250 foot long rock revetment along the east bank of the Mississippi River adjacent to Site R. The purpose of the stabilization project was to prevent further erosion of the riverbank and thereby minimize potential for the surficial release of waste material from the landfill. As constructed, the revetment does not provide for the permanent containment of the chemical wastes and other contaminants in the landfill. On February 13, 1992, the State of Illinois and Monsanto signed a consent decree entered in St. Clair County Circuit Court requiring further remedial investigations and feasibility studies to be conducted by Monsanto on Site R. As of the date of this Order, a final remedy for the Site has still not been determined.

SITE S: Site S is located on ABRTF property and is situated to the west-southwest of Site O. Historic aerial photographs indicate that Site S was a drum disposal area. In 1995, IEPA took samples at the Site. The Site S sample results indicated the presence of high levels of BNAs, pesticides, PCBs, and metals. PCBs were found in every sample. The northern portion of Site S is grassed and the southern portion of the Site is covered with gravel and fenced.

2. Information on the types of wastes disposed of and the types and levels of contamination found at the Sauget Area 2 Site have been compiled from a variety of cited sources and are listed in a document entitled "Volume 2, Sauget Area 2 - Data Tables/Maps" completed for U.S. EPA by Ecology & Environment, Inc. and dated February 1998.

Known contaminants at the Sauget Area 2 Site are as follows:

SITE O: Soil samples collected from Site O have revealed elevated levels of volatile organic compounds (VOCs) such as 1,1,1 trichloroethane (1,410 ppb), benzene (30,769 ppb), 4-methyl-2-pentanone (7,692 ppb), toluene (29,487 ppb), chlorobenzene (58,974 ppb), ethylbenzene (166,667E ppb), and total xylenes (615,385E ppb). Elevated levels of semi-volatile organics (SVOCs) were also detected including 1,4-dichlorobenzene (112,821 ppb), 1,2-dichlorobenzene (606,000 ppb), 1,4-dichlorobenzene (1,030,000 ppb), 1,2,4-trichlorophenol (26,923 ppb), naphthalene (34,615 ppb), 2-methylnaphthalene (160,256 ppb), n-nitrosodiphenylamine (50,000J ppb), pentachlorophenol (1,620,000 ppb), phenanthrene (230,000 ppb), fluoranthene (74,000 ppb), pyrene (282,051 ppb), butyl benzyl phthalate (3,846,154E ppb), benzo(a)anthracene (121,795 ppb), 1,2,4-trichlorobenzene (65.3 ppm) and chrysene (282,051 ppb). Elevated levels of PCBs were also detected in Site O soils including aroclor 1232 (30,366 ppb) and aroclor 1242 (1,871,795 ppb). Elevated levels of dioxins were also detected in Site O soils including tetrachlorodibenzo-p-dioxin (170 ng/g). Elevated levels of heavy metals were also detected in Site O soils including cadmium (31 ppm), copper (341 ppm), mercury (6.3 ppm), nickel (136 ppm) and zinc (1,398 ppm).

Groundwater samples collected from Site O have indicated the presence of elevated levels of VOCs including methylene chloride (52,000 ppb), trans-1,2-dichloroethene (14,000 ppb), 2-butanone (62,000 ppb), trichloroethene (83,000 ppb), benzene (190,000 ppb), 4-methyl-2-pentanone (38,000 ppb), tetrachloroethene (10,000 ppb), 1,1,2,2-tetrachoroethane (12,000 ppb), toluene (15,000 ppb), and chlorobenzene (180,000E ppb). Elevated levels of SVOCs were also detected in groundwater at Site O including phenol (1,100 ppb), 1,4-dichlorobenzene (15,000E ppb), 1,2-dichlorobenzene (11,000E ppb), 4-methylphenol (1,100 ppb), and 4-chloroanaline (780 ppb). Elevated levels of heavy metals have also been detected in groundwater at Site O including arsenic (133 ppb), cadmium (11 ppb), and lead (6,350 ppb).

SITE P: Soil samples collected from Site P have revealed elevated levels of VOCs such as toluene (413 ppb), and

total xylenes (450 ppb). Elevated levels of SVOCs were also detected including phenol (3,875J ppb), 1,4-dichlorobenzene (8,875J ppb), 1,2-dichlorobenzene (3,625J ppb) and di-n-butyl phthalate (16,250J ppb). Elevated levels of metals were also found in soils, such as lead (526 ppm), mercury (3.9 ppm) and cyanide (15 ppm).

SITE Q: Soil samples collected from Site Q have revealed elevated levels of organic compounds including 1,4-dichlorobenzene (1,200,000 ppb), bis(2-ethylhexyl)phthalate (1,100,000 ppb), di-n-butyl phthalate (900,000 ppb), chlorobenzene (100,000 ppb), ethylbenzene (790,000 ppb), toluene (2,400,000 ppb), 4-methyl-2-pentanone (250,000 ppb), and o-xylene (2,300,000 ppb). Elevated levels of PCBs were also detected in Site Q soils including aroclor 1254 (360,000 ppb), aroclor 1248 (70,000 ppb), and aroclor 1260 (16,000,000 ppb). An elevated level of 2,3,7,8-TCDD (dioxin) was also detected in Site Q soil at a concentration of 3.31 ppb. Elevated levels of heavy metals were also detected in soil samples collected from Site Q including antimony (17,900N ppm), arsenic (216 NS ppb), cadmium (152,000 ppm), chromium (3,650 ppm), copper (1,630 ppm), lead (195,000 ppm), mercury (4.9 ppm), nickel (371 N ppm), selenium (59.9 ppm), silver (30.2 N ppm), thallium (.89 B ppm), and zinc (9,520 ppm).

Groundwater samples collected from Site Q have revealed the presence of elevated levels of VOCs including 1,2 dichloroethane (3,000 ppb), benzene (2,000J ppb), 4-methyl-2-pentanone (2,700J ppb), 2-hexanone (3,500J ppb), toluene (1,600J ppb), and chlorobenzene (6,700J ppb). Elevated levels of SVOCs were also detected including phenol (190,000E ppb), 2-chlorophenol (33,000E ppb), 4-methylphenol (23,000E ppb), 2,4-dimethylphenol (2,800 ppb), 2,4-dichlorophenol (14,000E ppb), 4-chloroaniline (15,000E ppb), 2,4,6-trichlorophenol (6,000 ppb), 2-nitroaniline (2,000 ppb), pentachlorophenol (35,000E ppb), and acenaphthylene (3,900 ppb). Elevated levels of arsenic (100 ppb) and cyanide (1,560 ppb) were also detected in Site Q groundwater.

Site R: This site has been sampled extensively by U.S. EPA, Illinois EPA, and Monsanto starting in the early 1980's. A summary of the data collected at Site R are presented here. Sediment samples collected from a drainage ditch surrounding Site R showed VOC concentrations ranging from .002 to .035 ppm. SVOC concentrations in sediments ranged from .045 to 3.99 ppm. PCBs were detected at concentrations ranging from .08 to 1.5 ppm. Elevated levels of metals, particularly aluminum, iron and magnesium were also detected. Sediment samples collected adjacent to the Mississippi River on the west side of Site R showed SVOC contamination ranging from

.001 to 7.7 ppm. PCBs were also detected at concentrations ranging from .00001 to .23 ppm. Soil samples collected from Site R showed elevated levels of VOCs ranging from .15 to 5,800 ppm. SVOCs were found at levels ranging from .017 to 19,000 ppm. Pesticides were found at levels ranging from .011 to 99 ppm and PCBs were detected at levels ranging from .075 to 4,800 ppm. Elevated levels of arsenic, chromium, lead, nickel and mercury were also detected in Site R soils.

Leachate samples emanating from Site R adjacent to the Mississippi River were also collected. SVOC concentrations in the leachate ranged from .6 to 12.3 ppb. Pesticide concentrations ranged from .5 to 3.0 ppb and PCBs were detected at .08 ppb. Dioxin/furan concentrations ranged from .0001 to .0014 ppm. Cyanide was also detected at 71 ppb. Surface water samples were also collected from the adjacent waters of the Mississippi River near Site R, dioxins were found in the water ranging in concentration from .0001 to .0007 ppm.

Extensive groundwater investigations have also been conducted at Site R. Samples collected from wells on and immediately downgradient of Site R have shown high levels of VOCs in concentrations up to 38,136 ppb. SVOC concentrations have also been detected as high as 2,973,885 ppb.

Site S: Soil samples collected from Site S have shown elevated concentrations of VOCs including 1,1,1-trichloroethane (12,000 ppb), 4-methyl-2-pentanone (93,000 ppb), toluene (990,000 ppb), ethylbenzene (450,000 ppb), and total xylene (620,000 ppb). Elevated levels of SVOCs were also detected including naphthalene (200,000 ppb), di-n-butyl phthalate (1,500,000J ppb), butyl benzyl phthalate (490,000J ppb), bis(2-ethylhexyl)phthalate (20,000,000J ppb), and di-n-octyl phthalate (310,000 ppb). PCBs were also detected at elevated concentrations including aroclor 1248 (85,000pc ppb), aroclor 1254 (69,000c ppb), and aroclor 1260 (41,000pc ppb). Elevated levels of heavy metals were also detected in Site S soils including copper (139 ppm), lead (392 ppb), mercury (3.5 ppm), and zinc (327 ppm).

3. On information and belief, parties which generated wastes which were disposed of, released into and/or transported wastes to the Sauget Area 2 Site, include but are not limited by the following:

SITE O: Rogers Cartage Company, Midwest Rubber Reclaiming (Division of Empire Chem., Inc.), Amax Zinc Corporation, Mobil Oil Corporation, Monsanto Chemical Company, Russell

Bliss, Ethyl Corporation, Ethyl Petroleum Additives, Inc., and Clayton Chemical Co. (Division of Emerald Environmental, LLC.), Cerro Copper Products Company, Solutia, Inc., Blue Tee Corporation, Goldfields American Corporation, Wiese Planning and Engineering.

SITE P: Monsanto Chemical Company, and Kerr-McGee Chemical Corporation

SITE Q and/or R: Monsanto Chemical Company, Barry Weinmiller Steel Fabrication, Crown Cork & Seal Company, Inc., Dennis Chemical Company, Inc., Inmont Corporation, U.S. Paint Corporation, Kerr McGee Chemical Corporation, Dow Chemical, Mallinckrodt Chemical, Myco-Gloss, Clayton Chemical Company, Solutia, Inc., United Technologies Corporation, AALCO Wrecking Company, Inc., Abco Trash Service & Equip. Company, Able Sewer Service, Ajax Hickman Hauling, American Zinc Company, Atlas Service Company, Banjo Iron Company, Becker Iron & Metal Corporation, Belleville Concrete Cont. Company, Bi-State Parks Airport, Bi-State Transit Company, Boyer Sanitation Service, Browning-Ferris Industries of St. Louis, C&E Hauling, Cargill Inc., Century Electric Company, Circle Packing Company, Corkery Fuel Company, David Hauling, State of Illinois Department of Transportation, Disposal Service Company, Dore Wrecking Company, Dotson Disposal "All" Service, Edgemont Construction, Edwin Cooper Inc., Eight & Trendy Metal Company, Evans Brothers, Finer Metals Company, Fish Disposal, Fruin-Colnon Corporation, Gibson Hauling, H.C. Fournie Inc., H.C. Fournie Plaster, Hilltop Hauling, Huffmeier Brothers, Hunter Packing Company, Lefton Iron & Metal Company, Midwest Sanitation, Mississippi Valley Control, Obear Nestor, Roy Baur, Thomas Byrd, Trash Men Inc.

SITE S: Clayton Chemical Co.(Division of Emerald Environmental, LLC.)

NON SITE-SPECIFIC GENERATORS/TRANSPORTERS: Rogers Cartage Company, Browning Ferris Industries, Inc., Browning Ferris Industries of St. Louis, Inc., C&E Hauling Company, Disposal Services Company, Hilltop Hauling, Inc., Paul Sauget, National Vendors

4. On information and belief, parties which own and/or operate, or previously owned and/or operated, portions of the waste disposal areas at Sauget Area 2 include, but are not limited to, the following:

SITE O: A-1 Oil Corporation, Jerry Russell Bliss, Inc., Alton & Southern Railroad, Midwest Rubber Reclaiming

(Division of Empire Chemical, Inc.), Amax Zinc Corporation, Big River Zinc Corporation, Mobil Corporation, Solutia, Inc., Monsanto Chemical Corporation, Clayton Chemical Co. (Division of Emerald Environmental, LLC.), Village of Sauget, Sauget Sanitary Development and Research Assn,

SITE P: Solutia, Inc., Monsanto Chemical Company, Chicagc Title & Trust Company (Trust numbers 1083190 and 1083190), City of East St. Louis, Gulf-Mobile & Ohio Railroad, Southern Railway System, Magna Trust Company (Trust numbers 03-90-0744-00 and 22-358), Metro East Sanitary District, Norfolk Southern Corp., SI Enterprises L.P., Union Electric Company, and Cahokia Trust Properties.

SITE Q: Alton & Southern Railroad, Village of Cahokia, Monsanto Chemical Company, Norfolk Southern Corporation, Notre Dame Fleeting and Towing Services, Patgood Inc., Phillips Pipe Line Company, Pillsbury Company (leasee), River Port Terminal and Fleeting Company, Village of Sauget, St. Louis Grain Company, Union Electric Company, Cahokia Trust Properties, Eagle Marine Industries Inc., Sauget & Company (c/o Paul Sauget), Industrial Salvage & Disposal Company, Clayton Chemical Company, Con-Agra, Inc., Peavey Company.

SITE R: Monsanto Chemical Company, Solutia, Inc., and Cahokia Trust Properties.

SITE S: Chemical Waste Management, Norfolk Southern Corporation, Village of Sauget, Solutia, Inc., Monsanto Chemical Company, and Clayton Chemical Co. (Division of Emerald Environmental LLC).

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record in this matter, U.S. EPA has determined that:

1. The Sauget Area 2 Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

2. The substances described in Section III, paragraph 2 are "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

3. Each Respondent is a "person" as defined by Section 101(21)of CERCLA, 42 U.S.C. § 9601(21).

4. Respondent(s) listed in Section III, paragraph 4, are the past and present "owners or operators" of the Sauget Area 2 Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20). The Respondent(s) listed in Section III, paragraph 3, are persons who generated or who arranged for disposal or transport for disposal of hazardous substances at the Sauget Area 2 Site. Respondent(s) are therefore liable persons under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" into the "environment" as defined by Sections 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).

6. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 CFR Part 300. These factors include, but are not limited to, the following:

a. actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants; this factor is present at the Site due to the presence of elevated levels of contaminants, including VOCs, SVOCs, PCBs, dioxins, pesticides, and metals, in the surface soils and sediments of the disposal areas of the Site (i.e., Sites O, P, Q, R and S).

b. actual or potential contamination of drinking water supplies or sensitive ecosystems; this factor is present at the Site due to the presence of elevated levels of contaminants, including VOCs, SVOCs, and metals, in groundwater. Although the source of drinking water for local residents is assumed to be primarily from surface water sources located upstream of the Site, many residences in the Site area continue to use private wells for domestic uses, which could include occasional uses for drinking water purposes. Further, contaminated groundwater is discharging into the adjacent waters of the Mississippi River. The Mississippi River contains a variety of ecosystems which may be damaged by the types of contamination found at Sauget Area 2. There are also intakes along the Mississippi River downstream from the St. Louis Metro area that use the river as a source of drinking water.

c. high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; this factor is present at the Site due to the existence of elevated levels of VOCs, SVOCs, PCBs, dioxins, pesticides and metals in soil at the Site.

d. weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; this factor is present at the Site due to existence of elevated levels of VOCs, SVOCs, PCBs, dioxins, pesticides and metals in the soils within each component of Sauget Area 2 (Sites O, P, Q, R and S) which may be released directly into the Mississippi River as a result of flooding on the River. Those areas most vulnerable to inundation by the Mississippi River are Sites Q and R which are situated within the river-side of the Corps of Engineers' flood control levee. Such an event occurred in 1995, when, during a major flood event on the Mississippi River, drums of waste material (PCBs) were scoured out of the side of Site Q and were washed into the River and along the bank of the River.

7. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

8. The actions required by this Order, if properly performed, are consistent with the NCP, 40 CFR Part 300, as amended, and with CERCLA, and are reasonable and necessary to protect the public health, welfare, and the environment.

V. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondent(s) shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

1. Designation of Contractor, Project Coordinator, On-Scene Coordinator or Remedial Project Manager

Respondent(s) shall perform the actions required by this Order themselves or retain a contractor to undertake and complete the requirements of this Order. Respondent(s) shall notify U.S. EPA of Respondent(`)s(`) qualifications or the name and qualifications of such contractor, whichever is applicable, within 10 business days of the effective date of this Order. Respondent(s) shall also notify U.S. EPA of the name and qualifications of any other contractors or subcontractors retained to perform work under this Order at least 5 business days prior to commencement of such work. U.S. EPA retains the right to disapprove of the Respondent(s) or any of the contractors and/or subcontractors retained by the Respondent(s). If U.S. EPA disapproves a selected contractor, Respondent(s) shall retain a different contractor within 5 business days following U.S. EPA's disapproval, and shall notify

U.S. EPA of that contractor's name and qualifications within 8 business days of U.S. EPA's disapproval.

Within 5 business days after the effective date of this Order, the Respondent(s) shall designate a Project Coordinator who shall be responsible for administration of all the Respondent(`)s(`) actions required by the Order. Respondent(s) shall submit the designated coordinator's name, address, telephone number, and qualifications to U.S. EPA. U.S. EPA retains the right to disapprove of any Project Coordinator named by the Respondent(s). If U.S. EPA disapproves a selected Project Coordinator, Respondent(s) shall retain a different Project Coordinator within 8 business days following U.S. EPA's disapproval and shall notify U.S. EPA of that person's name and qualifications within 9 business days of U.S. EPA's disapproval. Receipt by Respondent(`)s(`) Project Coordinator of any notice or communication from U.S. EPA relating to this Order shall constitute receipt by all Respondent(s).

The U.S. EPA has designated Michael McAteer of the Remedial Response Branch, Region 5, as its Remedial Project Manager ("RPM"). Respondent(s) shall direct all submissions required by this Order to the RPM at 77 West Jackson Boulevard (SR-6J), Chicago, Illinois 60604-3590, by certified or express mail. Respondent(s) shall also send a copy of all submissions to Thomas Martin, Associate Regional Counsel, 77 West Jackson Boulevard, (C-14J), Chicago, Illinois, 60604-3590. All Respondent(s) are encouraged to make their submissions to U.S. EPA on recycled paper (which includes significant postconsumer waste paper content where possible) and using two-sided copies.

U.S. EPA and Respondent(s) shall have the right, subject to the immediately preceding paragraph, to change their designated RPM or Project Coordinator. U.S. EPA shall notify the Respondent(s), and Respondent(s) shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally but it shall be promptly followed by a written notice within two business days of oral notification.

2. Work to Be Performed

Respondent(s) shall develop and submit to U.S. EPA an RI/FS report (Task 3 of the SOW) in accordance with the attached Scope of Work ("SOW"). The attached SOW is incorporated into and made an enforceable part of this Order.

The RI/FS report shall be consistent with, at a minimum, U.S. EPA guidance entitled, "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (U.S. EPA,

Office of Emergency and Remedial Response, October, 1988) and any other guidance that U.S. EPA uses in conducting an RI/FS.

2.1 RI/FS Support Sampling Plan

Within 30 calendar days of the effective date of this Order, the Respondent(s) shall submit to U.S. EPA for approval a draft RI/FS Support Sampling Plan (Task 1 of the SOW) that is consistent with this Order and the SOW.

U.S. EPA may approve, disapprove, require revisions to, or modify the draft RI/FS Support Sampling Plan. If U.S. EPA requires revisions, Respondent(s) shall submit a revised Support Sampling Plan incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions.

In the event of U.S. EPA disapproval of the revised Support Sampling Plan, Respondent(s) may be deemed in violation of this Order; however, approval shall not be unreasonably withheld by U.S. EPA. In such event, U.S. EPA retains the right to terminate this Order, conduct a complete Support Sampling Plan and the sampling activities, and obtain reimbursement for costs incurred in conducting the plan and the sampling activities from the Respondent(s).

Respondent(s) shall not commence or undertake any support sampling activities at the Site without prior U.S. EPA approval.

2.1.1 Health and Safety Plan

As part of the RI/FS Support Sampling Plan, the Respondent(s) shall submit for U.S. EPA review and comment a plan that ensures the protection of the public health and safety (Task 1, Section D, of the SOW) during performance of on-site work under this Order. This plan shall comply with applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 CFR Part 1910. If U.S. EPA determines it is appropriate, the plan shall also include contingency planning. Respondent(s) shall incorporate all changes to the plan recommended by U.S. EPA, and implement the plan during the pendency of the support sampling.

2.1.2 Quality Assurance and Sampling

As part of the RI/FS Support Sampling Plan, the Respondent(s) shall ensure that all sampling and analyses performed pursuant to this Order conforms to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent(s) shall ensure that

the laboratory used to perform the analyses participates in a QA/QC program that complies with U.S. EPA guidance.

Upon request by U.S. EPA, Respondent(s) shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondent(s) shall provide to U.S. EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondent(s) shall also ensure provision of analytical tracking information consistent with, at a minimum, OSWER Directive No. 9240.0-2B, "Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites."

Upon request by U.S. EPA, Respondent(s) shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondent(s) or its (their) contractors or agents while performing work under this Order. Respondent(s) shall notify U.S. EPA not less than 10 business days in advance of any sample collection activity. U.S. EPA shall have the right to take any additional samples that it deems necessary.

2.2 RI/FS Report

Within 90 calendar days after the submittal of the Data Report (Task 3 of the SOW), the Respondent(s) shall submit to U.S. EPA for approval a draft RI/FS Report (Task 3 of the SOW) that is consistent with this Order and the SOW.

U.S. EPA may approve, disapprove, require revisions to, or modify the draft RI/FS Report. If U.S. EPA requires revisions, Respondent(s) shall submit a revised RI/FS Report incorporating all of U.S. EPA's required revisions within 21 calendar days of receipt of U.S. EPA's notification of the required revisions.

In the event of U.S. EPA disapproval of the revised RI/FS Report, Respondent(s) may be deemed in violation of this Order; however, approval shall not be unreasonably withheld by U.S. EPA. In such event, U.S. EPA retains the right to terminate this Order, conduct a complete RI/FS, and obtain reimbursement for costs incurred in conducting the RI/FS from the Respondent(s).

The revised report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

> Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this RI/FS Report, the information submitted is true, accurate, and complete.

Respondent(s) shall not commence or undertake any remedial actions at the Site without prior U.S. EPA approval.

2.4 Reporting

Respondent(s) shall submit a monthly written progress report to U.S. EPA concerning actions undertaken pursuant to this Order, beginning 30 calendar days after the effective date of this Order, until termination of this Order, unless otherwise directed in writing by the RPM. These reports shall describe all significant developments during the preceding period, including the work performed and any problems encountered, analytical data received during the reporting period, and developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

Any Respondent that owns any portion of the Sauget Area 2 Site shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice of this Order to the transferee and written notice of the proposed conveyance to U.S. EPA and the State. The notice to U.S. EPA and the State shall include the name and address of the transferee. The party conveying such an interest shall require that the transferee will provide access as described in Section V.3 (Access to Property and Information).

2.5 Additional Work

In the event that the U.S. EPA or the Respondent(s) determine(s) that additional work is necessary to accomplish the objectives of the RI/FS Report, notification of such additional work shall be provided to the other part(y)(ies) in writing. Any additional work which Respondent(s) determine(s) to be necessary shall be subject to U.S. EPA's written approval prior to commencement of the additional work. Respondent(s) shall complete, in accordance with standards, specifications, and schedules U.S. EPA has approved, any additional work Respondent(s) has (have) proposed, and which U.S. EPA has approved in writing or that U.S. EPA has determined to be necessary, and has (have) provided written notice of pursuant to this paragraph.

3. Access to Property and Information

Respondent(s) shall provide or obtain access to the Site and off-site areas to which access is necessary to implement this Order, and shall provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to U.S. EPA employees, contractors, agents, consultants, designees, representatives, and State of Illinois representatives. These individuals shall be permitted to move freely at the Site and

appropriate off-site areas to which Respondent(s) have access in order to conduct actions which U.S. EPA determines to be necessary. Respondent(s) shall submit to U.S. EPA, upon receipt, the results of all sampling or tests and all other data generated by Respondent(s) or its (their) contractor(s), or on the Respondent(`)s(`) behalf during implementation of this Order.

Where work or action under this Order is to be performed in areas owned by or in possession of someone other than Respondent(s), Respondent(s) shall use its (their) best efforts to obtain all necessary access agreements within 30 calendar days after the effective date of this Order, or as otherwise specified in writing by the RPM. Respondent(s) shall immediately notify U.S. EPA within 2 business days if, after using its (their) best efforts, it is (they are) unable to obtain such agreements. Respondent(s) shall describe in writing its (their) efforts to obtain access. U.S. EPA may, in its discretion, then assist Respondent(s) in gaining access, to the extent necessary to effectuate the actions described herein, using such means as U.S. EPA deems appropriate. Respondent(s) shall reimburse U.S. EPA for all costs and attorneys fees incurred by the United States in obtaining such access.

4. Record Retention, Documentation, Availability of Information

Respondent(s) shall preserve all documents and information in their possession relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for six years following completion of the actions required by this Order. At the end of this six year period and at least 60 days before any document or information is destroyed, Respondent(s) shall notify U.S. EPA that such documents and information are available to U.S. EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to U.S. EPA. In addition, Respondent(s) shall provide copies of any such non-privileged documents and information retained under this Section at any time before expiration of the six year period at the written request of U.S. EPA.

If Respondent(s) assert a privilege in lieu of providing documents, they shall provide U.S. EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Respondent(s). However, no documents, reports, or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

5. Off-Site Shipments

All hazardous substances, pollutants or contaminants removed off-site pursuant to this Order for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Revised Off-Site Rule, 40 CFR § 300.440.

6. Compliance With Other Laws

Respondent(s) shall perform all activities required pursuant to this Order in accordance with all the requirements of all federal and state laws and regulations. U.S. EPA has determined that the activities contemplated by this Order are consistent with the National Contingency Plan ("NCP").

Except as provided in Section 121(e) of CERCLA and the NCP, no permit shall be required for any portion of the activities conducted entirely on-site. Where any portion of the activities requires a federal or state permit or approval, the Respondent(s) shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statue or regulation.

7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the activities conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, the Respondent(s) shall immediately take all appropriate action to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent(s) shall also immediately notify the RPM or, in the event of his unavailability, shall notify the Regional Duty Officer, Emergency Response Branch, Region 5 at (312) 353-2318, of the incident or Site conditions. If Respondent(s) fail(s) to respond, U.S. EPA may respond to the release or endangerment and reserve the right to recover costs associated with that response.

Respondent(s) shall submit a written report to U.S. EPA within 7 business days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. Respondent(s) shall also comply with any other notification requirements, including those in CERCLA Section 103, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11004.

VI. AUTHORITY OF THE U.S. EPA REMEDIAL PROJECT MANAGER

The RPM shall be responsible for overseeing the implementation of this Order. The RPM shall have the authority vested in an RPM by the NCP, including the authority to halt, conduct, or direct any activities required by this Order, or to direct any other response action undertaken by U.S. EPA or Respondent(s) at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VII. REIMBURSEMENT OF COSTS

Respondent(s) shall pay all unpaid past response costs, and oversight costs, of the United States related to the Site that are not inconsistent with the NCP. As soon as practicable after the effective date of this Order, U.S. EPA will send Respondent(s) a bill for "past response costs" at the Site. U.S. EPA's bill will include an Itemized Cost Summary. "Past response costs" are all costs, including, but not limited to, direct and indirect costs and interest, that the United States, its employees, agents, contractors, consultants, and other authorized representatives incurred and paid with regard to the Sauget Area 2 Site.

In addition, U.S. EPA will send Respondent(s) a bill for "oversight costs" on an annual basis. "Oversight costs" are all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this AOC. "Oversight costs" shall also include all costs, including direct and indirect costs, paid by the United States in connection with the Site

Respondent(s) shall, within 30 calendar days of receipt of a bill, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund," to the following address:

U.S. Environmental Protection Agency
Superfund Accounting
P.O. Box 70753
Chicago, Illinois 60673

Respondent(s) shall simultaneously transmit a copy of the check to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590. Payments shall be designated as "Response Costs - Sauget Area 2 Site" and shall reference the payor(`)s(`) name and address, the EPA site identification number (05XX/0558), and the docket number of this Order.

In the event that any payment is not made within the deadlines described above, Respondent(s) shall pay interest on the unpaid

balance. Interest is established at the rate specified in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The interest shall begin to accrue on the date of the Respondent's receipt of the bill (or for past response costs, on the effective date of this Order). Interest shall accrue at the rate specified through the date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent(`)(s)(`) failure to make timely payments under this Section.

If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent(s) shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondent(s) shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent(s) shall simultaneously transmit a copy of both checks to the RPM. Respondent(s) shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 20 calendar days after the dispute is resolved.

VIII. DISPUTE RESOLUTION

The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

If the Respondent(s) object(s) to any U.S. EPA action taken pursuant to this Order, including billings for response costs, the Respondent(s) shall notify U.S. EPA in writing of its (their) objection(s) within 10 calendar days of such action, unless the objection(s) has (have) been informally resolved. This written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based, all factual data, analysis or opinion supporting Respondent(`)s(`) position, and all supporting documentation on which the Respondent(s) rely (hereinafter the "Statement of Position").

U.S. EPA and Respondent(s) shall within 15 calendar days of U.S. EPA's receipt of the Respondent(`)(s)(`) Statement of Position, attempt to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of U.S. EPA. U.S. EPA's decision regarding an extension of the Negotiation Period shall not constitute a U.S. EPA action subject to dispute resolution or a final Agency action giving rise to judicial review.

An administrative record of any dispute under this Section shall be maintained by U.S. EPA. The record shall include the written

notification of such dispute, and the Statement of Position served pursuant to the preceding paragraph.

Any agreement reached by the parties pursuant to this Section shall be in writing, signed by all parties, and shall upon the signature by the parties be incorporated into and become an enforceable element of this Order. If the parties are unable to reach an agreement within the Negotiation Period, U.S. EPA will issue a written decision on the dispute to the Respondent(s). The decision of U.S. EPA shall be incorporated into and become an enforceable element of this Order upon Respondent(`)(s)(`) receipt of the U.S. EPA decision regarding the dispute.

Respondent(`)(s)(`) obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent(s) shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs. No U.S. EPA decision made pursuant to this Section shall constitute a final Agency action giving rise to judicial review.

IX. FORCE MAJEURE

Respondent(s) agree(s) to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondent(s) or of any entity controlled by Respondent(s), including but not limited to its (their) contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite Respondent(`)(s)(`) best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

Respondent(s) shall notify U.S. EPA orally within 24 hours after Respondent(s) become aware of any event that Respondent(s) contend(s) constitute a force majeure, and in writing within 7 calendar days after Respondent(s) become aware of any events which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Respondent(s) shall take all reasonable measures to avoid and minimize the delays. Failure to comply with the notice provision of this Section shall be grounds for U.S. EPA to deny Respondent(s) an extension of time for performance. Respondent(s) shall have the burden of demonstrating by a preponderance of the evidence that the event is a force majeure,

that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay.

If U.S. EPA determines a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by U.S. EPA. Such an extension shall not alter Respondent (`)s(`) obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

X. STIPULATED AND STATUTORY PENALTIES

For each calendar day, or portion thereof, that Respondent(s) fail(s) to fully perform any requirement of this Order in accordance with the schedule established pursuant to this Order, Respondent(s) shall be liable as follows:

Deliverable/Activity	Penalty For Days 1-7	Penalty For > 7 Days
Failure to Submit a Draft Support Sampling Plan, or RI/FS Report	$1,000/Day	$2,500/Day
Failure to Submit a revised Support Sampling Plan, or RI/FS Report	$1,000/Day	$2,500/Day
Failure to Submit a Data Report	$500/Day	$1,000/Day
Late Submittal of Progress Reports or Other Miscellaneous Reports/Submittals	$250/Day	$500/Day
Failure to Meet any Scheduled Deadline in the Order	$250/Day	$500/Day

Upon receipt of written demand by U.S. EPA, Respondent(s) shall make payment to U.S. EPA within 20 calendar days and interest shall accrue on late payments in accordance with Section VII of this Order (Reimbursement of Costs).

Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether U.S. EPA has notified Respondent(s) of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondent(`)(s)(`) obligation(s) to complete the performance of the work required under this Order. Stipulated penalties shall accrue, but need not be paid, during any dispute resolution period concerning the particular penalties at issue. If Respondent(s) prevail(s) upon resolution, Respondent(s) shall pay only such penalties as the resolution requires. In its unreviewable discretion, U.S. EPA may waive its rights to demand all or a portion of the stipulated penalties due under this Section.

The stipulated penalties set forth above shall not be the sole or exclusive remedy for violations of this Order. Violation of any provision of this Order may subject Respondent(s) to civil penalties of up to twenty-seven thousand five hundred dollars ($27,500) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent(s) may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondent(s) violate this Order or any portion hereof, U.S. EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

XI. RESERVATION OF RIGHTS

Except as specifically provided in this Order, nothing herein shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Order. U.S. EPA also reserves the right to take any other legal or equitable action as it deems appropriate and necessary, or to require the Respondent(s) in the future to perform additional activities pursuant to CERCLA or any other applicable law.

XII. OTHER CLAIMS

By issuance of this Order, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent(s). The United

States or U.S. EPA shall not be a party or be held out as a party to any contract entered into by the Respondent(s) or its (their) directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out activities pursuant to this Order.

Except as expressly provided in Section XIII (Covenant Not To Sue), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondent(s) or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) or 107(a) of CERCLA, 42 U.S.C. §§ 9606(a), 9607(a).

This Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Respondent(s) waive(s) any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

No action or decision by U.S. EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XIII. COVENANT NOT TO SUE

Except as otherwise specifically provided in this Order, upon issuance of the U.S. EPA notice referred to in Section XVII (Notice of Completion), U.S. EPA covenants not to sue Respondent(s) for judicial imposition of damages or civil penalties or to take administrative action against Respondent(s) for any failure to perform actions agreed to in this Order except as otherwise reserved herein.

Except as otherwise specifically provided in this Order, in consideration and upon Respondent(`)s(`) payment of the response costs specified in Section VIII of this Order, U.S. EPA covenants not to sue or to take administrative action against Respondent(s) under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for recovery of past response costs incurred by the United States in connection with this action or this Order. This covenant not to sue shall take effect upon the receipt by U.S. EPA of the payments required by Section VIII (Reimbursement of Costs).

These covenants not to sue are conditioned upon the complete and satisfactory performance by Respondent(s) of their obligations under this Order. These covenants not to sue extend only to the Respondent(s) and do not extend to any other person.

XIV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondent(s) for matters addressed in this Order, the Parties hereto agree that the Respondent(s) is (are) entitled to protection from contribution actions or claims to the extent provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4). Nothing in this Order precludes Parties from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery.

XV. INDEMNIFICATION

Respondent(s) agree(s) to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (a) arising from, or on account of, acts or omissions of Respondent(s) and Respondent(`)(s)(`) officers, heirs, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this Order; and (b) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondent(s), and any persons for performance of work on or relating to the Site, including claims on account of construction delays. Nothing in this Order, however, requires indemnification by Respondent(s) for any claim or cause of action against the United States based on negligent action taken solely and directly by U.S. EPA (not including oversight or approval of plans or activities of the Respondent(s)).

XVI. MODIFICATIONS

Except as otherwise specified in Section V.2 (Work To Be Performed), if any party believes modifications to any plan or schedule are necessary during the course of this project, they shall conduct informal discussions regarding such modifications with the other parties. Any agreed-upon modifications to any plan or schedule shall be memorialized in writing within 7 business days; however, the effective date of the modification shall be the date of the RPM's oral direction. Any other requirements of this Order may be modified in writing by mutual agreement of the parties. Any modification to this Order shall be incorporated into and made an enforceable part of this Order.

If Respondent(s) seek permission to deviate from any approved plan or schedule, Respondent(`)(s)(`) Project Coordinator shall submit a written request to U.S. EPA for approval outlining the proposed modification and its basis.

No informal advice, guidance, suggestion, or comment by U.S. EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondent(s) shall relieve Respondent(s) of their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XVII. NOTICE OF COMPLETION

When U.S. EPA determines that all work has been fully performed in accordance with this Order, except for certain continuing obligations required by this Order (e.g., record retention, payment of costs), U.S. EPA will provide written notice to the Respondent(s).

XVIII. SUBMITTALS/CORRESPONDENCE

Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Order, shall be deemed submitted either when hand-delivered or as of the date of receipt by certified mail/return receipt requested, express mail, or facsimile.

Submissions to Respondent(s) shall be addressed to:

With copies to:

Submissions to U.S. EPA shall be addressed to:

Michael McAteer
U.S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

With copies to:

Thomas Martin
Associate Regional Counsel
U.S. EPA - Region 5
77 West Jackson Boulevard (C-14J)
Chicago, Illinois 606064-3590

Submissions to Illinois shall be addressed to:

Candy Morin
Illinois Environmental Protection Agency
Remedial Project Management Section
Division of Land Pollution Control
1021 N. Grand Avenue E.
P.O. Box 19276
Springfield, Illinois 62794-9276

XIX. SEVERABILITY

If a court issues an order that invalidates any provision of this Order or finds that Respondent(s) have sufficient cause not to comply with one or more provisions of this Order, Respondent(s) shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XX. EFFECTIVE DATE

This Order shall be effective upon signature by the Director, Superfund Division, U.S. EPA Region 5.

IN THE MATTER OF:

SAUGET AREA 2 SITE
SAUGET AND CAHOKIA, ILLINOIS

SIGNATORIES

Each undersigned representative of a signatory to this Administrative Order on Consent certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to bind such signatory, its directors, officers, employees, agents, successors and assigns, to this document.

Agreed this _____ day of _____, 2000

By _____

IT IS SO ORDERED AND AGREED

BY: _____ DATE: _____
William E. Muno, Director
Superfund Division
United States Environmental Protection Agency
Region 5

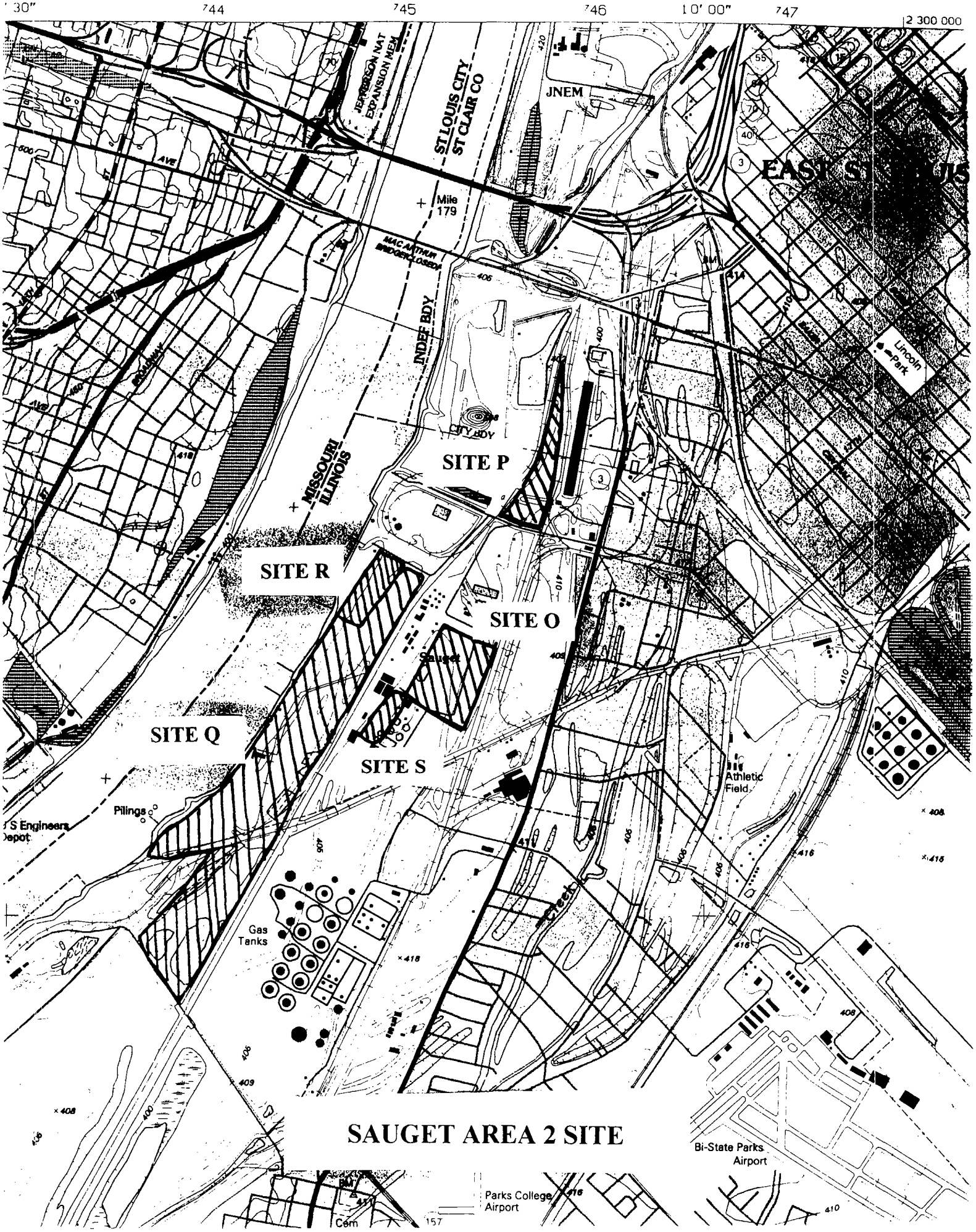
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
SAUGET AREA 2 SITE-WIDE
CAHOKIA, ST. CLAIR COUNTY, ILLINOIS

ORIGINAL
MAY 16, 2000

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	05/00/88	Ecology & Environment, Inc.	IEPA	Expanded Site Investigation Report, Dead Creek Project Sites, Final Report (Vol. 1 of 2)	478
2	05/00/88	Ecology & Environment, Inc.	IEPA	Expanded Site Investigation Report, Dead Creek Project Sites, Final Report (Vol. 2 of 2)	557
3	07/29/94	Ecology & Environment, Inc.	U.S. EPA	Removal Action Report, Sauget Area 2: Site Q (w/Site Photographs, Analytical Data Package, and Cost Projection)	53
4	08/24/94	Takacs, P., IEPA	Schwebke, U.S. EPA	Letter re: St. Clair County Sauget Sites, Area 2 - Sauget/ Superfund Compliance (w/Attachments/Exhibits)	213
5	09/22/94	Borries, S., U.S. EPA	Muno, W., U.S. EPA	*Action Memorandum*: Request for a Time-Critical Removal Action at Sauget Area 2, Sauget and Company Landfill (Site Q)	12
6	12/30/94	Takacs, P., IEPA	Rebbe, M., IDPH	Memorandum re: Sauget Sites, Area 1 and Area 2 w/Attachments	224
7	02/08/95	Orloff, K., ATSDR	Borries, S., U.S. EPA	ATSDR Record of Activity	2
8	02/21/95	Karecki, E., U.S. Fish & Wildlife Service	Borries, S., U.S. EPA	Memorandum re: Sediment Removal Action Level, Sauget Area 2, Site Q, Sauget, Illinois	2
9	08/31/97	Ecology and Environment, Inc.	U.S. EPA	*Preliminary Ecological Risk Assessment* for Sauget Area 2, Site Q	68

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
10	02/00/98	Ecology and Environment, Inc.	U.S. EPA	Sauget Area 2 Data Tables and Maps	50
11	10/15/98	Jones, B., U.S. EPA	McAteer, M., U.S. EPA	Memorandum: Information for Removal Action Memorandum for Sauget Area 2, Site Q	2
12	12/21/98	Turner, K., U.S. EPA	Muno, W., U.S. EPA	*Action Memorandum*: Determination of Threat to Public Health, Welfare, or the Environment at the Sauget Area 2 Site (Site Q) (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	18


SAUGET AREA 2 SITE
SITE P
SITE R
SITE O
SITE Q
SITE S
JNEM
JEFFERSON NAT EXPANSION MEM
ST LOUIS CITY
ST CLAIR CO
Mile 179
MAC ARTHUR BRIDGE CLOSED
INDEF BDY
CITY BDY
MISSOURI
ILLINOIS
EAST ST LOUIS
Lincoln Park
Athletic Field
Pilings
Gas Tanks
Bi-State Parks Airport
Parks College Airport
Cem

SCOPE OF WORK FOR
STREAMLINED REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
AT
SAUGET AREA 2 SITE
SAUGET AND CAHOKIA, ILLINOIS

PURPOSE:

The purpose of this Scope of Work (SOW) is to set forth requirements for the preparation of a streamlined Remedial Investigation and Feasibility Study (RI/FS). The RI shall evaluate the nature and extent of contamination resulting from the disposal/deposition of contaminants in Sauget Area 2 (Sites O, P, Q, R and S) and also assess the risk from this contamination on human health and the environment. The FS Report shall evaluate alternatives for addressing the impact to human health and/or the environment from the contamination at Sauget Area 2. The RI and FS Reports shall be conducted, at a minimum, consistent with the "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (U.S. EPA, Office of Emergency and Remedial Response, October, 1988) and any other guidances that U.S. EPA uses in conducting a RI/FS, as well as any additional requirements in the administrative order. The Respondents shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS at the Sauget Area 2 Site, except as otherwise specified herein.

At the completion of the RI/FS, U.S. EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD). The remedial action selected by U.S. EPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS reports, as adopted by U.S. EPA, and the risk evaluation/assessment will, with the administrative record, form the basis for the selection of the site's remedy and will provide the information necessary to support the development of the ROD.

As specified in CERCLA Section 104(a)(1), as amended by SARA, U.S. EPA will provide oversight of the Respondents' activities throughout the RI/FS, including all field sampling activities. The Respondents will support U.S. EPA's initiation and conduct of activities related to the implementation of oversight activities.

SCOPE:

The tasks to be completed as part of this RI/FS are:

Task 1. RI/FS Support Sampling Plan

Task 2. Remedial Investigation
Task 3. RI/FS Report
Task 4. Progress Reports

TASK 1: RI/FS SUPPORT SAMPLING PLAN

Within 30 calendar days of the effective date of the Administrative Order, Respondents shall submit a Sampling Plan to U.S. EPA and Illinois EPA that addresses all data acquisition activities. The objective of this RI/FS support sampling is to further determine the extent of contamination at the Site beyond that already identified by previous site investigations. The plan shall contain a description of equipment specifications, required analyses, sample types, and sample locations and frequency. The plan shall address specific hydrologic, hydrogeologic, and air transport characterization methods including, but not limited to, geologic mapping, geophysics, field screening, drilling and well installation, flow determination, and soil/water/sediment/waste sampling to determine extent of contamination.

Respondents shall identify the data requirements of specific remedial technologies that may be necessary to evaluate remedial activities in the RI/FS and the Respondents shall provide a schedule stating when events will take place and when deliverables will be submitted.

The RI/FS Support Sampling Plan shall include the following information:

A. Site Background

A brief summary of the Site location, general Site physiography, hydrology and geology shall be included. A summary description of the data already available shall be included which will highlight the areas of known contamination and the levels detected. Tables shall be included to display the minimum and maximum levels of detected contaminants across the Site.

B. Data Gap Description

Respondents shall make an analysis of the currently available data to determine the areas of the Site which require additional data in order to define the extent of contamination for purposes of implementing a remedial action. A description of the number, types, and locations of additional samples to be collected shall be included in this section of the sampling plan.

Descriptions of the following activities shall also be included:

i. Waste Characterization

Respondents shall include a program for characterizing the waste materials at the Site. This shall include an analysis of current information/data on past disposal practices at the Site. For buried wastes, test pits/trenches and deep soil borings shall be proposed in the plan to determine waste depths and volume and to determine the extent of cover over fill areas. Soil gas surveys shall also be proposed for the areas on and around fill areas of the site. Geophysical characterization methods, such as ground penetrating radar or magnetometry, to further delineate potential "hot spot" drum removal areas shall also be included.

ii. Hydrogeologic Investigation

The plan shall include the degree of hazard, the mobility of pollutants, discharges/recharge areas, regional and local flow direction and quality, and local uses of groundwater. The plan shall also develop a strategy for determining horizontal and vertical distribution of contaminants and may include other hydraulic tests such as slug tests, and grain size analysis to assist in determining future potential remediation options. Upgradient samples shall be included in the plan.

iii. Soils and Sediments Investigation

Respondents shall include a program to determine the extent of contamination of surface and subsurface soils at the Site. The plan shall also determine the extent, including depth, of contamination of sediments in the Mississippi River. Samples of any leachate from the areas described as fill shall also be collected.

iv. Surface Water Investigation

Respondents shall include a program to determine the areas of surface water contamination in the Mississippi River.

v. Air Investigation

Respondents shall include a program to determine the extent of atmospheric contamination from the various source areas at the Site. The program shall address the tendency of the substances identified through the waste characterization (i.e., PCBs) to enter the atmosphere, local wind patterns, and the degree of hazard.

vi. Ecological Assessment

Respondents shall include a plan for collecting data for the purpose of assessing the impact, if any, to aquatic and terrestrial ecosystems within and adjacent to Sauget Area 2, including within the Mississippi River, as

a result of the disposal, release and migration of contaminants. The plan shall include a description of the ecosystems affected, an evaluation of toxicity, an assessment of endpoint organisms, and the exposure pathways. The plan shall also include a description of any toxicity testing or trapping to be included as part of the assessment. The ecological assessment shall be conducted in accordance with U.S. EPA guidance, including Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (June 5, 1997; EPA 540-R-97-006).

vii. Pilot Tests
Respondents shall include a program for any pilot test(s) necessary to determine the implementability and effectiveness of technologies where sufficient information is not otherwise available.

C. Sampling Procedures

Respondents shall include a description of the depths of sampling, parameters to be analyzed, equipment to be used, decontamination procedures to be followed, sample quality assurance, data quality objectives and sample management procedures to be utilized in the field. All sampling and analyses performed shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with U.S. EPA guidance.

Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondents shall provide to U.S. EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Respondents shall also ensure provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites.

Upon request by U.S. EPA, Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents or their contractors or agents. Respondents shall notify U.S. EPA not less than 10 business days in advance of any sample collection activity. U.S. EPA shall have the right to take any additional samples that it deems necessary.

D. Health and Safety Plan

Respondents shall prepare a Site safety plan which is designed to protect on-site personnel, area residents and nearby workers from physical, chemical and all other hazards posed by this sampling event. The safety plan shall develop the performance levels and criteria necessary to address the following areas:

- General requirements
- Personnel
- Levels of protection
- Safe work practices and safe guards
- Medical surveillance
- Personal and environmental air monitoring
- Personal hygiene
- Decontamination - personal and equipment
- Site work zones
- Contaminant control
- Contingency and emergency planning (including response to fires/explosions)
- Logs, reports and record keeping

The safety plan shall, at a minimum, follow U.S. EPA guidance document Standard Operating Safety Guides (Publication 9285.1-03, PB92-963414, June 1992), and all OSHA requirements as outlined in 29 CFR 1910.

E. Schedule

Respondents shall include a schedule which identifies timing for initiation and completion of all tasks to be completed as part of this RI/FS Support Sampling Plan.

TASK 2: REMEDIAL INVESTIGATION

Respondents shall conduct the Remedial Investigation according to the U.S. EPA approved Sampling Plan and schedule. Respondents shall coordinate activities with U.S. EPA's Remedial Project Manager (RPM). Respondents shall provide the RPM with all laboratory data.

TASK 3: REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)

Within 180 calendar days of the collection of the last field sample as part of the Remedial Investigation (Task 2) (as designated by the U.S. EPA RPM), Respondents shall submit to U.S. EPA for approval a draft RI/FS report addressing all of Sauget Area 2. The RI/FS shall be consistent with the administrative order and this SOW. The RI/FS shall be completed in accordance with the following requirements:

1 Executive Summary

2 Site Characterization

2.1 Site Description and Background
- 2.1.1 Site Location and Physical Setting
- 2.1.2 Present and Past Facility Operations and Disposal Practices
- 2.1.2 Geology/Hydrology/Hydrogeology
- 2.1.3 Current and past groundwater usage in the site area
- 2.1.4 Surrounding Land Use and Populations
- 2.1.5 Sensitive Ecosystems
- 2.1.6 Meteorology/Climatology

2.2 Groundwater Fate and Transport

- Contaminant Characteristics
- Groundwater Fate and Transport Processes
- Groundwater Contaminant Migration Trends
- Groundwater Modeling

2.3 Previous Removal/Remedial Actions
2.4 Source, Nature, and Extent of Contamination
2.5 Analytical Data
2.6 Human Health Risk Assessment
2.7 Ecological Risk Assessment

3 Identification of Remedial Action Objectives

3.1 Determination of Remedial Action Scope
3.2 Determination of Remedial Action Schedule
3.3 Identification of and Compliance with ARARs

4 Identification and Analysis of Remedial Action Alternatives

5 Detailed Analysis of Alternatives

5.1 Effectiveness
- 5.1.1 Overall Protection of Public Health and the Environment
- 5.1.2 Compliance with ARARs and Other Criteria, Advisories, and Guidance
- 5.1.3 Long-Term Effectiveness and Permanence
- 5.1.4 Reduction of Toxicity, Mobility, or Volume Through Treatment
- 5.1.5 Short-Term Effectiveness

5.2 Implementability
- 5.2.1 Technical Feasibility
- 5.2.2 Administrative Feasibility
- 5.2.3 Availability of Services and Materials
- 5.2.4 State and Community Acceptance

5.3 Cost
- 5.3.1 Direct Capital Costs
- 5.3.2 Indirect Capital Costs
- 5.3.3 Long-Term Operation and Maintenance

6 Comparative Analysis of Remedial Action Alternatives

7 Schedule for RI/FS Submission

RI/FS Outline:

1 Executive Summary

The Executive Summary shall provide a general overview of the contents of the RI/FS. It shall contain a brief discussion of the Site and the current and/or potential threat posed by conditions at the Site.

2 Site Characterization

The RI/FS shall summarize available data on the physical, demographic, and other characteristics of the Site and the surrounding areas. Specific topics which shall be addressed in the site characterization are detailed below. The site characterization shall concentrate on those characteristics necessary to evaluate and select an appropriate remedy.

2.1 Site Description and Background

The site description includes current and historical information. The following types of information shall be included, where available and as appropriate, to the site-specific conditions and the scope of the remedial action.

2.1 Site Description and Background

- 2.1.1 Site Location and Physical Setting
- 2.1.2 Present and Past Facility Operations and Disposal Practices

2.1.2 Geology/Hydrology/Hydrogeology
2.1.3 Current and past groundwater usage in the site area
2.1.4 Surrounding Land Use and Populations
2.1.5 Sensitive Ecosystems
2.1.6 Meteorology/Climatology

2.2 Previous Removal Actions

The site characterization section shall also describe any previous removal and remedial actions at the Site. Previous information, if relevant, shall be organized as follows:

* The scope and objectives of the previous removal action(s)
* The amount of time spent on the previous removal action(s)
* The nature and extent of hazardous substances, pollutants, or contaminants treated or controlled during the previous removal action(s) (including all monitoring conducted)
* The technologies used and/or treatment levels used for the previous removal action(s).

2.3 Source, Nature and Extent of Contamination

This section shall summarize the available site characterization data for Sauget Area 2, including the locations of the hazardous substances, pollutants, or contaminants; the quantity, volume, size or magnitude of the contamination; and the physical and chemical attributes of the hazardous pollutants or contaminants.

2.4 Analytical Data

This section shall present the available data, including, but not limited to, soil, groundwater, surface water, sediments, and air. This section should discuss any historical data gaps that were identified, and the measures taken to develop all necessary additional data.

2.5 Human Health Risk Assessment

The risk assessment shall focus on actual and potential risks to persons coming into contact with on-site contaminants as well as risks to the surrounding residential and industrial worker populations from exposure to contaminated soils, sediments, surface water, air, and ingestion of contaminated organisms in surrounding impacted ecosystems. Reasonable maximum estimates of exposure shall be defined for both current land use conditions and reasonable future land use conditions. It shall use data from the Site to identify the chemicals of concern, provide an estimate of how and to what extent human receptors might be exposed to these chemicals, and provide an

assessment of the health effects associated with these chemicals. The evaluation shall project the potential risk of health problems occurring if no cleanup action is taken at the Site and establish target action levels for COCs (carcinogenic and non-carcinogenic). The risk evaluation shall be conducted in accordance with U.S. EPA guidance including, at a minimum: Risk Assessment Guidance for Superfund (RAGS) (EPA/540/1-89/002, December 1989) and RAGS Part D (EPA 540/R/97/033, January 1998). The risk assessment shall also include the following elements:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at the Site and identify the major contaminants of concern.

- Dose-Response Assessment. Contaminants of concern should be selected based on their intrinsic toxicological properties.

- Conceptual Exposure/Pathway Analysis.

- Characterization of Site and Potential Receptors.

- Exposure Assessment. Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the Site.

- Risk Characterization.

- Identification of Limitations/Uncertainties.

2.6 Ecological Risk Assessment

The ecological risk assessment shall be conducted in accordance with U.S. EPA guidance including, at a minimum: Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments, (EPA/540/R/97/006, June 1997).

The ecological risk assessment shall describe the data collection activities conducted as part of Task 1(B)(vi) as well as the following information:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at and adjacent to the Site and identify the major contaminants of concern.

- Dose-Response Assessment. Contaminants of concern should be selected based on their intrinsic toxicological properties.

- Prepare Conceptual Exposure/Pathway Analysis.

- Characterization of Site and Potential Receptors.

- Select Chemicals, Indicator Species, and End Points. In preparing the assessment, the Respondents shall select representative chemicals, indicator species (species that are especially sensitive to environmental contaminants), and end points on which to concentrate.

- Exposure Assessment. The exposure assessment will identify the magnitude of actual exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels.

- Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment will address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity (e.g., weight of evidence for a chemical's carcinogenicity).

- Risk Characterization. During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, shall be compared to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the Site are affecting or could potentially affect the environment.

- Identification of Limitations/Uncertainties. Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.

3 Identification of Remedial Action Objectives

The RI/FS shall develop remedial and, where appropriate, removal action objectives, taking into consideration the following factors:

* Prevention or abatement of actual or potential exposure to nearby human populations, (including workers), animals, or the food chain from hazardous substances, pollutants, or contaminants;

* Prevention or abatement of actual or potential contamination of drinking water supplies and ecosystems;

* Stabilization or elimination of hazardous substances in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;

* Treatment or elimination of hazardous substances, pollutants, or contaminants in soils or sediments that may migrate;

* Elimination of threat of fire or explosion;

* Acceptable chemical-specific contaminant levels, or range of levels, for all exposure routes.

* Mitigation or abatement of other situations or factors that may pose threats to public health, welfare, or the environment.

3.1 Determination of Remedial Action Scope

The RI/FS shall define the broad scope and specific short-term and long-term objectives of the remedial action and address the protectiveness of the remedial action.

3.2 Determination of Remedial Action Schedule

The general schedule for remedial action and, where appropriate, removal activities shall be developed, including both the start and completion time for the remedial action.

3.3 Identification of and Compliance with ARARs

The RI/FS shall identify all applicable, relevant and appropriate requirements at both the federal and state levels that will apply to the remedial action. The RI/FS shall also describe how the ARARs will be met.

4 Identification and Analysis of Remedial Action Alternatives

Based on the analysis of the nature and extent of contamination and on the cleanup objectives developed in the previous section, a limited number of alternatives appropriate for addressing the remedial action objectives shall be identified and assessed. Whenever practicable, the

alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

The use of presumptive remedy guidance, if appropriate and applicable to any of the disposal areas of the Sauget Area 2 Site, may also provide an immediate focus to the identification and analysis of alternatives. This guidance includes, but is not limited to: Implementing Presumptive Remedies (EPA 540-R-97-029, October 1997). Presumptive remedies involve the use of remedial technologies that have been consistently selected at similar sites or for similar contamination.

A limited number of alternatives, including any identified presumptive remedies, shall be selected for detailed analysis. Each of the alternatives shall be described with enough detail so that the entire treatment process can be understood. Technologies that may apply to the media or source of contamination shall be listed in the RI/FS.

The preliminary list of alternatives to address the Sauget Area 2 Site shall consist of, but is not limited to, treatment technologies (i.e., thermal methods), removal and off-site treatment/disposal, removal and an on-site disposal, and in-place containment for soils, sediments and wastes.

5 Detailed Analysis of Alternatives

Defined alternatives are evaluated against the short- and long-term aspects of three broad criteria: effectiveness, implementability, and cost.

5.1 Effectiveness

The effectiveness of an alternative refers to its ability to meet the objective regarding the scope of the remedial action. The "Effectiveness" discussion for each alternative shall evaluate the degree to which the technology would mitigate threats to public health and the environment. Criteria to be considered include:

5.1.1 Overall Protection of Public Health and the Environment

How well each alternative protects public health and the environment shall be discussed in a consistent manner. Assessments conducted under other evaluation criteria, including long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs shall be included in the discussion. Any unacceptable short-term impacts shall be identified. The discussion shall focus on how each alternative achieves adequate protection and describe how the alternative will reduce, control, or eliminate risks at the Site through the use of treatment, engineering, or institutional controls.

5.1.2 Compliance with ARARs and Other Criteria, Advisories, and Guidance

The detailed analysis shall summarize which requirements are applicable or relevant and appropriate to an alternative and describe how the alternative meets those requirements. A summary table may be employed to list potential ARARs. In addition to ARARs, other Federal or State advisories, criteria, or guidance to be considered (TBC) may be identified.

5.1.3 Long-Term Effectiveness and Permanence

This evaluation assesses the extent and effectiveness of the controls that may be required to manage risk posed by treatment of residuals and/or untreated wastes at the Site. The following components shall be considered for each alternative: magnitude of risk, and, adequacy and reliability of controls.

5.1.4 Reduction of Toxicity, Mobility, or Volume Through Treatment

Respondents' analysis shall address U.S. EPA's policy of preference for treatment including an evaluation based upon the following subfactors for a particular alternative:

* The treatment process(es) employed and the material(s) it will treat
* The amount of the hazardous or toxic materials to be destroyed or treated
* The degree of reduction expected in toxicity, mobility, or volume
* The degree to which treatment will be irreversible
* The type and quantity of residuals that will remain after treatment
* Whether the alternative will satisfy the preference for treatment

5.1.5 Short-Term Effectiveness

The short-term effectiveness criterion addresses the effects of the alternative during implementation before the remedial objectives have been met. Alternatives shall also be evaluated with respect to their effects on human health and the environment following implementation. The following factors shall be addressed as appropriate for each alternative:

* Protection of the Community
* Protection of the Workers
* Environmental Impacts
* Time Until Response Objectives are Achieved

5.2 Implementability

This section is an assessment of the implementability of each alternative in terms of the technical and administrative feasibility and the availability of the goods and services necessary for each alternative's full execution. The following factors shall be considered under this criterion:

5.2.1 Technical Feasibility

The degree of difficulty in constructing and operating the technology; the reliability of the technology, the availability of necessary services and materials; the scheduling aspects of implementing the alternatives during and after implementation; the potential impacts on the local community during construction operation; and the environmental conditions with respect to set-up and construction and operation shall be described. Potential future removal actions shall also be discussed. The ability to monitor the effectiveness of the alternatives may also be described.

5.2.2 Administrative Feasibility

The administrative feasibility factor evaluates those activities needed to coordinate with other offices and agencies. The administrative feasibility of each alternative shall be evaluated, including the need for off-site permits, adherence to applicable non-environmental laws, and concerns of other regulatory agencies. Factors that shall be considered include, but are not limited to, the following: statutory limits, permits and waivers.

5.2.3 Availability of Services and Materials

The RI/FS must determine if off-site treatment, storage, and disposal capacity, equipment, personnel, services and materials, and other resources necessary to implement an alternative shall be available in time to maintain the remedial schedule.

5.2.4 State and Community Acceptance

State and Community Acceptance will be considered by U.S. EPA before a final remedial action is decided upon. Respondents need only mention in the RI/FS that U.S. EPA will consider and address State and community acceptance of an alternative when making a recommendation and in the final selection of the alternative in the ROD.

5.3 Cost

Each alternative shall be evaluated to determine its projected costs. The evaluation should compare each alternative's capital and operation and maintenance costs. The present worth of alternatives should be calculated.

5.3.1 Direct Capital Costs

Costs for construction, materials, land, transportation, analysis of samples, treatment shall be presented.

5.3.2 Indirect Capital Costs

Cost for design, legal fees, permits shall be presented.

5.3.3 Long-Term Operation and Maintenance Costs

Costs for maintenance and long-term monitoring shall be presented.

6 Comparative Analysis of Remedial Action Alternatives

Once remedial action alternatives have been described and individually assessed against the evaluation criteria described in Section 5, above, a comparative analysis shall be conducted to evaluate the relative performance of each alternative in relation to each of the criteria. The purpose of the analysis shall be to identify advantages and disadvantages of each alternative relative to one another so that key trade offs that would affect the remedy selection can be identified.

7 Schedule for RI/FS Submission

Within 30 calendar days following the collection of the last field sample as part of the Remedial Investigation (Task 2), Respondents shall present at a meeting the alternatives to undergo a more detailed analysis. A draft RI/FS shall be submitted to U.S. EPA and Illinois EPA within 180 calendar days following the collection of the last field sample as part of the Remedial Investigation (Task 2). The amended RI/FS, if required, shall be submitted to U.S. EPA and Illinois EPA within 21 calendar days of the receipt of U.S. EPA's comments on the draft RI/FS.

Following U.S. EPA approval of the RI/FS, U.S. EPA will issue a Proposed Plan to the public wherein U.S. EPA will propose one, or a combination, of the alternatives evaluated in the FS. Public comments will be solicited and evaluated before U.S. EPA makes a final decision on a remediation plan. The final decision will be documented in the ROD for the Sauget Area 2 Site.

TASK 6: PROGRESS REPORTS

Respondents shall submit a monthly written progress report to U.S. EPA and Illinois EPA concerning actions undertaken pursuant to the Order and this SOW, beginning 30 calendar days after the effective date of the Order, until termination of the Order, unless otherwise directed in writing by the RPM. These reports shall describe all significant developments during the preceding period, including the work performed and any problems encountered, analytical data received during the reporting period, and developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

SCHEDULE FOR MAJOR DELIVERABLES

Deliverable	Deadline
TASK 1: Draft RI/FS Support Sampling Plan	30 calendar days after effective date of Order
TASK 1: Final RI/FS Support Sampling Plan	21 calendar days after receipt of U.S. EPA comments
TASK 3: Draft RI/FS Report	180 calendar days following collection of last field sample as part of RI (Task 2). To be designated by RPM
TASK 3: Final RI/FS Report	21 calendar days after receipt of U.S. EPA comments on draft RI/FS Report
TASK 4: Monthly Progress Reports	10th business day of each month (Commencing 30 days after effective date of Order)
Miscellaneous Documents	In accordance with submittal date provided by RPM