## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

## IN THE MATTER OF:

ITT Thompson Industries Superfund Site Madison, Madison County, Florida

ITT Industries, Inc., Respondent ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION AND PHASE I EXPANDED SITE INVESTIGATION/REMEDIAL INVESTIGATION

4123

U.S. EPA Region 4 CERCLA Docket No. 99-04-C

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

#### I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order on Consent ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and ITT Industries, Inc. (Respondent). This Order provides for the performance of the removal and investigation actions by Respondent and the reimbursement of response costs incurred by the United States in connection with the property known as ITT Thompson Industries Site ("Site") located in Madison, Madison County, Florida. This Order requires Respondent to conduct the removal and investigation actions described herein to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

This 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, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622, as amended ("CERCLA"), and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 <u>Federal</u> <u>Register</u> 2923, and further delegated to the EPA Regional

Administrators by EPA Delegation Nos. 14-14-A and 14-14-C and 14-14-D, then through the Director, Waste Management Division, through the Associate Division Director, Waste Management Division, to the Chiefs of the Federal Facilities, Emergency Response & Removal, North and South Superfund Remedial and Waste Programs Branches by Regional Delegation 14-14-C.

EPA has notified the State of Florida (Florida Department of Environmental Protection) of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

Respondent's participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order except in a proceeding to enforce the terms of this Order. Respondent agrees to comply with and be bound by the terms of this Order. Respondent further agrees 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 EPA, and upon Respondent and Respondent's heirs, successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Order. Respondent is jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondent with any provision of this Order shall not excuse or justify noncompliance by any other Respondent.

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

#### III. FINDINGS OF FACT

For the purposes of this Order, EPA finds that:

The Site is located within a mixed commercial and residential area in Madison, Madison County, Florida. The Site occupies approximately 3 acres and includes approximately 107,725 square feet of manufacturing space under roof, an office trailer, and a small storage shed. The portions of the site not occupied by structures are paved with asphalt or concrete. Residential areas are located south, east and west of the site. Mill Pond and Brickyard Pond are located to the northeast of the Site. Two unnamed ponds are located to the southwest of the Site.

The ITT Thompson Industries site operated from approximately 1955

until the present. Madison Industries leased the property to Stainless Products, Thompson Industries, ITT Thompson and Thompson International. The facility is now used for storage of cypress mulch. The facility reportedly manufactured wheel ornamentation for cars, including wheel covers and wire wheel products. Chlorinated solvents including trichloroethylene (TCE) were used at the facility. Madison Industries currently leases the property to a wholesale operation that packages and distributes mulch.

In 1994 routine water samples collected from private wells in the Yellow Pines subdivision, located approximately 0.6 miles east of the site, exhibited concentrations of TCE above the maximum contaminant level. The subdivision contains at least 144 private wells and further testing detected TCE contamination in 73 of the private supply wells, with numerous detections exceeding the state and federal maximum contaminant level for TCE.

The September 1996 Preliminary Assessment and the October 1997 Site Investigation indicate that the ITT Thompson Industries Site adversely impacted site groundwater with several chlorinated and nonchlorinated volatile organic compounds (VOCs) present to depths of at least 70 feet bgs (below ground surface). Site groundwater samples collected exceeded state and federal Primary Drinking Water Standards for six VOCs: benzene; 1,1-dichloroethylene (DCE); cis-1,2 DCE; TCE; toluene; and vinyl chloride.

The groundwater migration pathway is the major pathway of concern, especially with the karst topography/sinkhole features in the Site area. Along with the private wells in the nearby area, two main municipal supply wells and one standby well, used by the City of Madison, are located within a 2-mile radius of the site. The surface water migration pathway may also be of concern due to the proximity of a number of ponds located down gradient of the Site.

Previous studies have shown the southwestern portion of the Site has the highest documented concentrations of VOCs, specifically TCE, DCE, and vinyl chloride. Soil contamination in this area may be a contributing source to the groundwater contamination on, and around, the facility.

#### IV. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting these removal and investigation actions, EPA has determined that:

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

2. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" 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. Each Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

- A. ITT Thompson Industries, a former subsidiary of Respondent, ITT Industries, Inc., was the "operator" of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a) (2) of CERCLA, 42 U.S.C. § 9607(a) (2).
- B. Respondent ITT Industries, Inc. does not acknowledge liability for this Site.

5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the Site as defined by Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

6. The conditions present at the Site may constitute an imminent and substantial endangerment to public health, welfare, or the environment. Factors that may be considered are set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300 ("NCP").

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 or pollutants or contaminants; this factor is present at the Site due to the existence of benzene, toluene, ethylbenzene, total xylenes, cis-1,2-dichloroethylene, trichloroethylene, and vinyl chloride;

b. actual or potential contamination of drinking water supplies or sensitive ecosystems; this factor is present at the Site due to the existence of benzene, toluene, ethylbenzene, total xylenes, cis-1,2-dichloroethylene, trichloroethylene, and vinyl chloride;

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 benzene, toluene, ethylbenzene, total xylenes, cis-1,2-dichloroethylene, trichloroethylene, and vinyl chloride;

7. The actual or threatened release of hazardous substances at or 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 removal and investigation actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP or CERCLA.

## 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 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. <u>Designation of Contractor</u>, <u>Project Coordinator</u>, <u>and On-Scene</u> <u>Coordinator</u>

Respondent shall perform the removal and investigation actions required by this Order themselves or retain contractors to perform these actions. Respondent shall notify EPA of Respondent's qualifications or the names and qualifications of such contractors within thirty (30) business days of the effective date of this Order. Respondent shall also notify EPA of the names and qualifications of any other contractors or subcontractors retained to perform the removal and/or investigation actions under this Order at least five (5) business days prior to commencement of such actions. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondent, or of Respondent's choice of themselves to do the removal and/or investigation actions. If EPA disapproves of a selected contractor or the Respondent, Respondent shall retain a different contractor or notify EPA that it will perform the removal and/or investigation actions itself within ten (10) business days following EPA's disapproval and shall notify EPA of that contractor's name or Respondent and qualifications within ten (10) business days of EPA's disapproval.

Within three (3) business days after the effective date of this Order, Respondent shall designate a Project Coordinator who shall be responsible for administration of all the Respondent's actions required by the Order. Respondent shall submit the designated coordinator's name, address, telephone number, and qualifications To the greatest extent possible, the Project Coordinator to EPA. shall be present on Site or readily available during Site work. EPA retains the right to disapprove of any Project Coordinator named by Respondent. If EPA disapproves of a selected Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within five (5) business days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondent.

EPA has designated Don Rigger of the EPA, Region 4's Emergency Response & Removal Branch as its On-Scene Coordinator ("OSC") for the removal actions. EPA has designated Randa Chichakli of the EPA, Region 4's South Site Management Branch as its Remedial Project Manger ("RPM") for the Phase I ESI/RI actions. Respondent shall send two copies of all submissions required by this Order, one addressed to the OSC and one to the RPM to 61 Forsyth Street, SW, Atlanta, Georgia 30303-8909. EPA and Respondent shall have the right, subject to the immediately proceeding paragraph, to change their designated OSC, RPM or Project Coordinator. Respondent shall notify EPA, five (5) business days before such a change is made. The initial notification may be orally made but it shall be promptly followed by a written notice.

#### 2. Work to Be Performed

Respondent shall perform, at a minimum, the following investigation and removal actions:

Phase I of the Expanded Site Investigation/Remedial Investigation (ESI/RI). The overall objective of the ESI/RI is to isolate the contamination from the Site. The investigation shall be conducted to provide more information to define the hydrogeologic setting and determine the extent of contamination. The Respondent shall develop a Work Plan, Sampling and Analysis Plan, and a Health and Safety Plan in accordance with the attached ESI/RI Scope of Work. Ten percent (10%) of all samples collected will be analyzed for Target Analyte List inorganic elements (metals) and Target Compound List (organic compounds) [TAL/TCL].

Installation and operation of an in-situ soil vapor extraction (SVE) system in the paved area southwest of the main warehouse structure to remove VOCs from the soil. This SVE system will be installed pursuant to the attached Interim Removal Measures Work Plan.

During the installation of the SVE system, samples will be taken at 5 foot intervals with 30% verification of the highest concentrations using the EPA Contract Laboratory Program (CLP).

#### 2.1 Work Plan and Implementation.

Within thirty (30) business days after the effective date of this Order, Respondent shall submit to EPA for approval a draft Work Plan for performing the removal and investigation actions set forth above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Order.

EPA may approve, disapprove, require revisions to, or modify the draft Work Plan. If EPA requires revisions, Respondent shall submit a revised draft Work Plan within seven (7) business days of receipt of EPA's notification of the required revisions.

Respondent shall implement the Work Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be fully enforceable under this Order. Respondent shall notify EPA at least 48 hours prior to performing any on-Site work pursuant to the EPA-approved Work Plan. Respondent shall not commence or undertake any removal or investigation actions on-Site without prior EPA approval.

# 2.2 Health and Safety Plan and Air Monitoring Plan

Within forty-five (45) business days after the effective date of this Order, the Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Order. This plan shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, and currently updated July 1988. In addition, the plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 CFR Part 1910. Respondent shall incorporate all changes to the plan recommended by EPA, and implement the plan during the pendency of the removal and investigation actions. An Air Monitoring Plan must be developed by Respondent and submitted to EPA for review with the Health and Safety Plan. This plan will be designed to ensure the safety of the on-Site personnel and the surrounding area residents.

#### 2.3 <u>Quality Assurance and Sampling</u>

All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow the following documents, as appropriate, as guidance for QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01; "Environmental Response Team Standard Operating Procedures," OSWER Directive Numbers 9360.4-02 through 9360.4-08; and US EPA Region 4 Standard Operating Procedure and Quality Assurance Manual (May 1996).

Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondent shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any

samples collected by Respondent while performing work under this Order. Respondent shall notify EPA not less than five (5) business days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

# 2.4 Post-Removal Site Control

In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for postremoval Site control consistent with Section 300.415(k) of the NCP and OSWER Directive 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal Site control arrangements.

## 2.5 <u>Reporting</u>

Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Order every thirtieth (30th) calendar day after the date of receipt of EPA's approval of the Work Plan until termination of this Order, unless otherwise directed by the OSC or RPM. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

# 2.6 Final Reports

## 2.6.1 Final Phase I ESI/RI Report

Within sixty (60) calendar days after completion of the Phase I ESI/RI sampling required under this Order, the Respondent shall submit for EPA review and approval a final report summarizing the investigation actions taken and the results obtained.

## 2.6.2 Final Removal Report

Within thirty (30) calendar days after completion of all removal actions required under this Order, the Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Order. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Order, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (<u>e.g.</u>, manifests, invoices, bills, contracts, and permits). The final 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 the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## 3. Access to Property and Information

Respondent shall attempt to obtain access to the Site and shall provide, via reasonable attempts, access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. If ITT Industries, Inc. obtains access, such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and State of Florida representatives. EPA acknowledges that such access will be constrained by the requirements of the approved Health and Safety Plan. Respondent shall submit to EPA, upon request, the results of all sampling or tests and all other data generated by Respondent or their contractors, or on the Respondent's behalf during implementation of this Order.

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

## 4. Record Retention, Documentation, Availability of Information

Respondent shall preserve all documents and information relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for ten (10)years following completion of the removal and investigation actions required by this Order. At the end of this ten year-period and thirty (30) days before any document or information is destroyed, Respondent shall notify EPA that such documents and information

are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Respondent shall provide documents and information retained under this section at any time before expiration of the ten year-period at the written request of EPA.

Respondent may assert a business confidentiality claim pursuant to 40 CFR § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Order, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Respondent. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondent.

## 5. Off-Site Shipments

All off-Site shipments of hazardous substances shall be in compliance with all applicable state and federal laws governing such shipments including applicable laws and regulations of the U.S. Department of Transportation. All hazardous substances, pollutants, or contaminants removed off-Site pursuant to this Order for processing, treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA and when applicable, pursuant to Section 121(d) (3) of CERCLA, 42 U.S.C. § 9621(d) (3), and the following rule: "Amendment to the National Oil and Hazardous Substances Pollution Contingency Plan; Procedures for Planning and Implementing Off-Site Response Actions: Final Rule" 58 FR 49200 (September 22, 1993)" codified at 40 CFR § 300.440. EPA will provide information on the acceptability of a facility under Section 121(d) (3) of CERCLA and the above rule.

Unless impracticable, prior notification of out-of-state waste shipments should be given to EPA at least ten (10) calendar days prior to any such shipment. Such notification shall be consistent with OSWER Directive 9330.2-07, and shall, at a minimum, include the name of the receiving processing or treatment-storage and disposal facility, facility compliance status, facility contact, planned transportation dates and any waste hauler.

## 6. Compliance With Other Laws

Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e) and 40 CFR Section 300.415(i). In accordance with 40 CFR Section 300.415(i), all on-Site actions required pursuant to this Order shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. (See "The Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991). Respondent shall identify ARARs in the Work Plan subject to EPA approval.

#### 7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the actions 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, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC at (404) 562-8744, or, in the event of his unavailability, shall notify the EPA National Response Center Hotline at (800)424-8802 or the EPA Region 4 Emergency Response Center at (404)562-8700 of the incident or Site conditions. If Respondent fails to respond, EPA may respond to the release or endangerment and reserve the right to pursue cost recovery.

In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify EPA's OSC and the National Response Center. Respondent shall submit a written report to EPA within five (5) calendar 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. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section 103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.

# VI. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

The OSC shall be responsible for overseeing the Respondent's implementation of the removal actions included in this Order. The OSC shall have the authority vested in an OSC by the NCP. Such authority includes the authority to halt, conduct, or direct any work required by this Order, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

## VII. REIMBURSEMENT OF COSTS

Respondent shall reimburse EPA for all future response costs, not inconsistent with the NCP, incurred by the United States in connection with this Order. Future response costs are all costs, including, but not limited to, indirect and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this AOC, verifying the Work, or otherwise implementing, overseeing, or enforcing this AOC beginning on the effective date hereof.

On a periodic basis, EPA shall submit to Respondent a bill for future response costs that includes a MARS report. Respondent shall, within twenty-one (21) calendar days of receipt of the 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. EPA Region 4 Superfund Accounting P.O. Box 100142 Atlanta, GA 30384 ATTENTION: Collection Officer for Superfund

Payments shall be designated as "Response Costs - ITT Thompson Industries Site" and shall reference the payor's name and address, the EPA site identification number A4E7, and the docket number of this Order.

In the event that the payment for future response costs are not made within twenty-one (21) calendar days of the Respondent's receipt of the bill, Respondent shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA. The interest to be paid for Respondent's failure to make timely payments on future response costs shall begin to accrue on the date of the Respondent's receipt of the bill. 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.

Respondent may dispute all or part of a bill for future response costs submitted under this Order, if Respondent alleges that EPA has made an accounting error, or if Respondent alleges that a cost item is inconsistent with the NCP.

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 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 shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent 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 seven (7) business 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. This Section shall govern the resolution of any disagreements between the parties with respect to the requirements of this Order.

If the Respondent objects to any EPA action taken pursuant to this Order, including billings for future response costs, the Respondent shall notify EPA in writing of their objections, together with an explanation thereof, within seven (7) business days of such action, unless the objections have been informally resolved.

EPA and Respondent shall within fourteen (14) business days from EPA's receipt of the Respondent's written objections attempt to resolve the dispute through formal negotiations (Negotiation Period). The negotiation period may be extended at the sole discretion of EPA. EPA's decision regarding an extension of the Negotiation Period shall not constitute an EPA action subject to dispute resolution or a final agency action giving rise to judicial review.

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Any agreement reached by the parties pursuant to this section shall be in writing, signed by both parties, and shall upon the signature by both 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, an EPA management official at the Division Director level or higher will issue a written decision on the dispute to the Respondent. The decision of EPA shall be incorporated into and become and enforceable element of this Order upon Respondent's receipt of the 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 shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this section shall constitute a final agency action giving rise to judicial review prior to a judicial action brought by the United States to enforce the decision.

#### IX. FORCE MAJEURE

Respondent agrees to perform all requirements under this Order

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

Respondent shall notify EPA orally within twenty-four (24) hours after the event, and in writing within five (5) business days after Respondent becomes or should have become aware of events which constitute a <u>force majeure</u>. 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 shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall waive any claim of <u>force</u> <u>majeure</u> by the Respondent.

If EPA determines a delay in performance of a requirement under this Order is or was attributable to a <u>force majeure</u>, the time period for performance of that requirement shall be extended as deemed necessary by 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 <u>force majeure</u>.

#### X. STIPULATED AND STATUTORY PENALTIES

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

For each day during which Respondent fails to perform activities in accordance with the schedules contained in this Consent Order and in the various plans and reports required under this Consent Order incorporated by reference herein, Respondent shall be liable to EPA for stipulated penalties in the following amounts:

<u>Period of Failure to Comply</u>	Penalty Per Violation Per Day	
1st through 14th day	\$1,000	
15th through 44th day	\$1,750	
45th day and beyond	\$2,500	

Upon receipt of written demand by EPA, Respondent shall make payment to EPA within ten (10) calendar days. Interest shall

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accrue on late payments as of the date the payment is due which is the date of the violation or act of non-compliance triggering the stipulated penalties.

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 EPA has notified Respondent of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondent's obligations to complete the performance of the work required under this Order.

Violation of any provision of this Order may subject Respondent to civil penalties of up to twenty-five thousand dollars (\$25,000) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent 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 violate this Order or any portion hereof, 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 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 or from taking any action within its authority to respond to an imminent and substantial endangerment. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable Moreover, nothing herein shall limit the power and law. authority of EPA or the United States to seek criminal enforcement against Respondent for any criminal activities of Respondent. EPA reserves the right to bring an action against Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed by Respondent. Nothing herein shall waive any of Respondent's rights to assert any claim against their insurers or any third party for matters arising from or relating to this Site or this Order, including, without limitation, claims for breach of contract, contribution, tortious conduct and indemnity.

#### XII. OTHER CLAIMS

By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

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Except as expressly provided in Section XIV - Covenant Not To Sue, nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondent 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) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 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 waives 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 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 EPA notice referred to in Section XX - Notice of Completion, EPA covenants not to sue Respondent for judicial imposition of damages or civil penalties or to take administrative action against Respondent for any failure to perform removal and/or investigation 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, EPA covenants not to sue or to take administrative action against Respondent under Section 107(a) of CERCLA for recovery of past and future response costs incurred by the United States in connection with these removal and investigation actions or this Order. This covenant not to sue shall take effect upon the receipt by 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 of its obligations under this Order. These covenants not to sue extend only to the Respondent and do not extend to any other person.

## XIV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondent for matters addressed in this Order, the Parties hereto agree that the Respondent is 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 the United States or the Respondent 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 agrees 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, 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) Respondents, and any persons for performance of work on or relating to the Site, including claims on account of construction delays. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding paragraph. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

#### XVI. INSURANCE

At least seven (7) calendar days prior to commencing any on-Site work under this Order, Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of one (1) million dollars, combined single limit. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

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## XVII. FINANCIAL ASSURANCE

Within sixty (60) calendar days after the effective date of this Order the Respondent shall demonstrate to EPA that they meet one of the financial assurance mechanisms specified in 40 CFR Section 264.143 for the sufficient estimated costs of work to be performed by the Respondent under this Order.

## XVIII. MODIFICATIONS

Modifications to any plan or schedule or Work Plan may be made in writing by the OSC/RPM or at the OSC/RPM's oral direction. If the OSC/RPM makes an oral modification, it will be memorialized in writing within ten (10) business days; provided, however, that the effective date of the modification shall be the date of the OSC/RPM's oral direction. Any other requirements of the Order may be modified in writing by mutual agreement of the parties.

If Respondent seeks permission to deviate from any approved Work Plan or schedule Statement of Work, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed Work Plan modification and its basis.

No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent 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.

#### XIX. ADDITIONAL REMOVAL ACTION

If EPA determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Respondent of that determination. Unless otherwise stated by EPA, within thirty (30) calendar days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondent may submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of this Order. Upon EPA's

approval of the plan pursuant to Section 2.1 - Work Plan and Implementation, Respondent shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This section does not alter or diminish the OSC/RPM's authority to make oral modifications to any plan or schedule pursuant to Section XVIII - Modifications.

## XX. NOTICE OF COMPLETION

When SPA determines, after EPA's review of the Final Report, that all removal and investigation actions have been fully performed in accordance with this Order, EPA will provide notice to the Respondent. If EPA determines that any removal and/or investigation actions have not been completed in accordance with this Order, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modifies the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Order.

#### XXI. SEVERABILITY

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

#### XXII. EFFECTIVE DATE

This Order shall be effective seven (7) calendar days after the Order is signed by EPA, Region 4.

The undersigned representative of Respondent certifies that it is fully authorized to enter into the terms and conditions of this Order and to bind the parties they represent to this document.

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day of Apvembirk, 6th ORDERED And Agreed this It is 1998., G BY: DATE: Doug (I Mef hir

Emergency Response and Removal Branch Waste Management Division U.S. EPA, Region 4

13/98 EFFECTIVE DATE:

# SCOPE OF WORK FOR THE PHASE I EXPANDED SITE INVESTIGATION/REMEDIAL INVESTIGATION AT THE ITT THOMPSON INDUSTRIES SITE

# I. INTRODUCTION

The objective of the Phase I Expanded Site Investigation/Remedial Investigation (ESI/RI) is to provide documentation for the Hazard Ranking System (HRS) documentation record to support National Priorities List (NPL) rulemaking at the ITT Thompson Industries Superfund Site (Site). ESI/RI sampling is designed to satisfy HRS data requirements by documenting any observed releases, observed contamination, and levels of actual contamination at targets. The ESI/RI builds on background information and analytical data collected in the Preliminary Assessment (PA), the Site Investigation (SI), or Site Inspection Prioritization (SIP) and gathers additional substantive data to provide thorough documentation of all factors that significantly impact the Site HRS score. Each of these documents will be used in preparing the HRS documentation record.

The Respondent shall perform the information review, planning, field sampling and analyses, and final ESI/RI report. All work shall be performed in accordance with this Scope of Work, the <u>Guidance for Performing Site Inspections Under CERCLA (Interim</u> <u>Final)</u> (U.S. EPA Office of Emergency and Remedial Response, September, 1992) (the "Site Assessment Guidance"), <u>Hazard Ranking</u> <u>System (HRS) Guidance Manual</u> (U.S. EPA Office of Solid Waste and Emergency Response), the <u>National Oil and Hazardous Substances</u> <u>Pollution Contingency Plan</u> (March, 1990), and; <u>Engineering</u> <u>Support Branch Standard Operating Procedures and Ouality</u> <u>Assurance Manual</u>, EPA Region IV, Environmental Services Division (ESD-SOP).

II. Task 1 - Planning (Site Assessment Guidance, Chapter 3)

Each ESI/RI requires a site-specific work plan, sample plan, and health and safety plan. Consistent with the objective of the ESI/RI, the specific project scope shall be planned by the Respondent and EPA. The Respondent shall document the specific project scope in a Work Plan.

The objectives of the ESI/RI for the ITT Thompson Industries Superfund Site have been determined preliminarily, based on available information, to be the following:

1. Review existing information for ESI/RI planning. The starting point of the ESI/RI can be determined by reviewing the previous analytical and non-sampling information.

- 2. Review relevant guidance to understand the Site Assessment process. This information shall be used in performing the information review, planning, and conducting the ESI/RI field work.
- 3. Provide documentation for the HRS package to support National Priorities List (NPL) rulemaking. ESI/RI sampling shall be designed to satisfy HRS data requirements by documenting any observed releases, observed contamination, and levels of actual contamination at targets.

The Site Management Strategy for the ITT Thompson Industries Superfund Site ESI/RI includes the following:

- 1. A complete assessment of the Site including any and all data required to support the HRS package.
- 2. Evaluate the Site as a whole.
- 3. EPA oversight of the Respondent's conduct of the work to ensure compliance with applicable laws, regulations, and guidance and to ensure that the work proceeds in a timely fashion.

## A. Review Information for ESI/RI Planning (3.5)

The Respondent shall gather and analyze the existing background data and information regarding the Site and shall conduct a Site Reconnaissance visit to assist in planning the ESI/RI.

# 1. <u>Review non-sampling information and previous</u> <u>analytical data</u> (3.5.1; 3.5.2)

Available Site data shall be thoroughly compiled and reviewed by the Respondent. This information shall be used to determine additional data needed for HRS scoring and Site characterization and to determine which data needed for HRS scoring have already been developed and need not be duplicated. To facilitate the collection of groundwater and surface water information, the Respondent shall obtain topographic maps covering a 4 mile radius, prepare 4 mile radius rings, and provide a list of the water bodies along a 15 mile surface water pathway, and a Site map that is accurate and to scale.

## 2. <u>Conduct Site Reconnaissance Visit</u> (3.7)

During the reconnaissance visit, the Respondent shall locate all potential sources, determine the physical state of wastes deposited at the source, identify each source type, examine each source for evidence of contamination migration, evaluate the degree of source containment, identify overland flow paths, and determine the distance from sources to onsite and nearby targets.

# B. Planning Deliverables (3.6)

At the conclusion of the project planning phase, the Respondent shall submit an ESI/RI Work Plan, a Sampling and Analysis Plan, and a Health and Safety Plan. The ESI/RI Work Plan, and Sampling and Analysis Plan must be reviewed and approved by EPA and the Health and Safety Plan reviewed by EPA prior to the initiation of field activities.

# 1. ESI/RI Work Plan (3.6.1)

A Work Plan documenting the decisions and evaluations completed during the planning process shall be submitted to EPA for review and approval. The Work Plan shall be developed in conjunction with the Sampling and Analysis Plan and the Health and Safety Plan, although each Plan may be delivered under separate cover. The Work Plan shall address general and Site specific considerations, and shall include:

- A summary of background information on the Site, including site history and geological and
- hydrogeological features of the region; ESI/RI Objectives;
- A schedule for completion of each major activity and submission of each deliverable. This schedule shall be consistent with Attachment A;
- A description of personnel, special training needs, organization, and equipment requirements; and
- A description of any non-standard equipment or services.

2. <u>Sample Plan</u> (3.6.2)

The Sample Plan can be incorporated into the Work Plan, or it may be a separate document. The Respondent shall prepare a Sample Plan to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data Data Quality Objectives (DQOs) of the investigation set by EPA. The Sample Plan shall be developed pursuant to the objectives and concepts of the August 1998 Study Plan developed by EPA's Science and Ecosystems Support Division (supplied to Respondent August It shall define in detail the sampling and data-gathering 1998). methods that shall be used on the project, and the project objectives, organization and functional activities. It shall include sampling objectives, sample location (horizontal and vertical) and frequency, sampling equipment and procedures, sample handling and analysis, and quality assurance/quality control (QA/QC) protocols that shall be used to achieve the desired DQOs. In addition, the Sample Plan shall address personnel qualifications, sampling procedures, sample custody, analytical procedures, and data reduction, validation, and These procedures shall be consistent with the EPA, reporting. Region IV, Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, May 1996.

> The Respondent shall demonstrate, in advance and to EPA's satisfaction, that each laboratory it may use is qualified to conduct the proposed work. This demonstration must include use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved by EPA in the Sample Plan for the Site. The laboratory must have and follow an EPA-approved QA program. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment and records for sample collection, transportation, and analysis. EPA may require that the Respondent submits detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. In addition, EPA may require submittal of data packages equivalent to those generated in the EPA Contract Laboratory Program (CLP) and may require laboratory analysis of performance samples (blank and/or spike samples) in sufficient number to determine the capabilities of the laboratory. If a laboratory not currently participating in the CLP is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA shall be used. In addition, if the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA review and approval granted prior to the shipment of Site samples to that laboratory for analysis.

# 3. <u>Health and Safety Plan</u> (3.6.3)

A Health and Safety Plan shall be prepared in compliance with OSHA regulations and protocols. The Health and Safety Plan shall include the elements described in the Site Assessment Guidance, such as a description of Site hazards and risks, designated levels of protection, medical monitoring, and Site control. It shall be noted that EPA does not "approve" the Respondent's Health and Safety Plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

## III. Task 2 - Community Relations (3.7.4)

EPA plans to conduct community relations activities during the ESI/RI at the Site. In general, community relations activities will be conducted in accordance with <u>Community Relations in</u> <u>Superfund: A Handbook, Section 4.1</u> (OSWER Directive 9230.0-03C, January 1992). Although implementation of community relations activities is the responsibility of EPA, the Respondent may be requested to assist by providing information regarding the history of the Site and participating in public meetings. The extent of the Respondent's involvement in community relations activities is left to the discretion of EPA. All community relations activities conducted by Respondent shall be subject to oversight by EPA.

# IV. Task 3 - Sampling Strategies (Site Assessment Guidance, Chapter 4)

The primary purpose of the Site ESI/RI sampling program is to assess the nature of the Site, and to support response and further action decisions. The Respondent shall design the ESI/RI sampling to investigate and document observed releases, observed contamination, and levels of target exposure to contamination. The ESI/RI sampling shall supplement data and information developed in the PA, and SI.

## A. General Sampling Principles

The Respondent shall plan and conduct the ESI/RI sampling in accordance with the following general sampling principles:

1. Sample to Identify Targets Exposed to a Hazardous Substance: The Respondent shall plan and conduct Site investigation sampling to identify populations or sensitive environments exposed to Site-related hazardous substances. Sample locations shall be selected for targets that may be contaminated by hazardous substances likely to be

attributable to the Site. Sampling shall focus on migration pathways and the direction of nearest targets.

2. Sample to Identify Hazardous Substances Present at the Site: The objective of sampling sources is to identify hazardous substances present at the Site.

3. Sample to Demonstrate a Release: The ESI/RI sampling shall focus on demonstrating whether a release of a hazardous substance to a pathway has occurred. To demonstrate a release, analytical data must indicate that the hazardous substance is present at levels significantly above background, and demonstrate that the release is attributable to the Site.

4. Sample to Discriminate among Alternative Sources of Contamination: The ESI/RI sampling shall be designed to determine whether contamination is attributable to the Site.

5. Sample to Determine Representative Background Concentrations: The ESI/RI sampling shall characterize background concentrations of hazardous substance, either naturally occurring or resulting from off-site influences. The same methods shall be used to sample and analyze background samples that are used for Site samples.

6. Sample to Verify Field and Laboratory Practices: QA/QC samples shall be collected, stored, and analyzed using the same methods as for other samples.

- B. ESI/RI Sampling Strategies (4.2,4.3,4.4,4.5,4.6,4.7,4.8)
- 1. Source characterization: The Respondent shall sample sources to identify specific hazardous substances potentially present at the Site. This shall include samples to estimate the depth of a source and to describe the area of a source. In addition, samples shall be collected to estimate hazardous constituent quantity or hazardous waste volume quantity.
- 2. QA/QC samples: The full complement of QA/QC samples shall be collected to ensure data of rigorous quality that meets the established DQOs, including duplicate and trip blank samples. Multiple samples at critical locations may also be required.
- 3. Release to groundwater: The Respondent shall sample Site monitoring wells, and other existing wells likely to be exposed to hazardous substances emanating from the Site. The groundwater sampling shall be conducted to demonstrate whether a release has occurred and to

# identify any targets exposed to actual contamination.

- 4. Drinking water targets: The Respondent shall identify the number of private drinking-water wells within a 4 mile radius of the Site, and sample those likely to be contaminated by a release from the Site. Municipal wells within that radius shall be sampled if there is reasonable probability of site-related contamination. The total population served by each public well located within the 4 mile radius, whether water from any of the wells is treated or blended with water from other water supplies, and the relative contribution of the various wells in those systems to the total system output shall be identified.
- 5. Release to surface water: The Respondent shall sample at or just downstream of the probable point of entry of Site contaminants to surface water pathways. Sampling of surface water shall be conducted to document any releases and targets exposed to actual contamination.
- 6. Drinking water targets exposed to actual surface water contamination: The Respondent shall document the uses of surface water within 15 downstream miles from the point at which overland flow from the facility reaches surface water body. The Respondent shall identify a the locations of drinking water intakes, the population served by those intakes, whether such intakes are blended with another supply, and the percent of the total blended supply provided by that intake and the location of the other supply. If EPA determines that the intakes are potentially impacted by a release from the Site, the Respondent shall collect sediment, aqueous and benthic samples at or beyond points of drinking water withdrawal prior to treatment.
- 7. Human food chain organisms exposed to actual surface water contamination: The Respondent shall collect sediment, aqueous, and/or benthic tissue samples from within or beyond any identified fishery boundaries potentially impacted by a release from the Site.
- 8. Sensitive environments exposed to actual surface water contamination: The Respondent shall collect sediment and aqueous samples at or beyond any sensitive environment potentially impacted by a release from the Site. Collection of sediment and aqueous samples shall be conducted to document whether a release of hazardous substances to sensitive environments and whether targets have been exposed to contamination.
- 9. Observed surficial contamination: The Respondent shall

sample source areas to better characterize surficial contamination. This sampling shall be conducted in conjunction with source characterization. Samples shall be collected from a depth of 2 feet or less.

10. Resident population targets exposed to observed surficial contamination: The Respondent shall sample properties potentially impacted by a release from the Site. Samples shall be collected from within the property boundary and 200 feet from such targets, except for terrestrial sensitive environments and resources, for which samples shall be collected from within the environment or resource boundaries.

# VI. Task 4 - Review and Validate Analytical Data (5.1)

The Respondent shall evaluate all analytical data for validity and applicability. Validation shall include review of laboratory analyses and comparison of the body of data to performance criteria. Laboratory data packages shall be validated according to guidelines established in the Work Plan and the Sample Plan.

V. Task 5 - ESI/RI data evaluation, site scoring and preparation of ESI/RI Report (Site Assessment Guidance, Chapters 5 and 6)

EPA is responsible for identification of analytical data for scoring, review of non-sampling information, and for site scoring. The Respondent shall generate an ESI/RI narrative report which summarizes the findings of the field investigation conducted at the Site. The Respondent shall conduct the review and analysis of the Site information, and prepare the ESI/RI report.

After the review of the ESI/RI, EPA Regional management will determine whether the Site will be considered for the NPL, whether No Further Remedial Action is Planned, or whether alternate actions will be taken.

# ATTACHMENT A GENERAL SCHEDULE FOR MAJOR ESI/RI ACTIVITIES AND DELIVERABLES ť.

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ACTIVITY	DUE DATES
Effective Date of AOC	x
Supervising Contractor Selected	X+15
EPA Approval of Supervising Contractor	Y
Site Reconnaissance Visit	Y+15
Submit Draft Work Plan, Sample Plan Health and Safety Plan	¥+60
Receipt of EPA comments on Draft Plans	Z
Submit final Work Plan, Sample Plan, Health and Safety Plan	Z+30
EPA's approval of final Plans	XX .
Initiate Field Work	XX+20
Field work complete	XX+60
Submit validated data and information to EPA	XX+120