Site Work Plan
Emergency and Rapid Response Services

U.S. Smelter and Lead Residential Area Superfund Site- Zone 3,
Chemours Property Addendum
East Chicago, Indiana

September 20, 2016

Prepared for
U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, IL 60604

Under Contract No.: EP-S4-16-04
Task Order: 009
Project No: US5-009

1.0 INTRODUCTION

This Work Plan has been prepared by Environmental Restoration, LLC (ER) on behalf of U.S. Environmental Protection Agency Region 5 (EPA) to support the activities authorized under Task Order (TO) #009 of Contract EP-S4-16-02. This plan describes the project management, logistical procedures and operation approach that will be carried out by ER at the USS Lead Site (Site) during the removal of lead contaminated soils from residential properties in Zone 3.

This Work Plan includes the Site Security Plan. A Traffic Management Plan (TMP) will be submitted separately. Due to the small footprint of the stockpile area a SWPPP is not anticipated for ER activities.

Revisions to this plan may be necessary as work commences and site conditions warrant it or if additional properties are added to the scope of work. Revisions to the plan will be approved by EPA prior to implementation. Approved revisions will be incorporated into the plan and the revised plan will be distributed to the appropriate project participants.

1.1. SITE LOCATION

The portion of the site relevant to this Work Plan addendum consists of the Chemours property located at 5215 Kennedy Avenue in East Chicago, Indiana. The site laydown yard, backfill stockpile will be located on open land at the Chemours Property Site. Office facilities will be located at the USS Lead Site located at 490 East 149 Place in East Chicago, IN. A small field office will be placed at the entrance of the Chemours property.

This Work Plan addresses storage of clean backfill material at the Chemours Site. All backfill will be tested prior to stockpiling at the Chemours Site.

2.0 PROJECT OBJECTIVES AND SCOPE

The objective of the project is to conduct a removal action at the site to mitigate the threats to public health, welfare and the environment posed by the presence of uncontrolled hazardous substances. The project scope, as outlined by the Statement of Work (SOW) includes the following elements:

- Develop and implement a Site Health & Safety Plan
- Stage clean fill materials for backfill
- Provide for site security, as directed by the EPA TOCOR.

3.0 PROJECT ORGANIZATION, STAFFING AND RESOURCES

ER will primarily attempt to utilize personnel, equipment, and supplies from ER's South Holland, Illinois office as allowable with support from other offices as needed. Rental equipment used at the site will be procured from local sources when feasible to minimize mobilization costs. In general, equipment and materials will be brought in on an as needed basis. The initial ERRS crew for the Chemours portion of this project will consist of:

Qty	Classification
1	Response Manager
1	Field Cost Accountant
1	Foreman
1	Cleanup Technician
1	Equipment Operator
5	Truck Drivers

1	H&S Officer (onsite as needed)

As the nature and intensity of site activities change, the crew size and makeup may change with the consent of the EPA TOCOR.

Equipment will include:

Qty	Description
10	Pickup trucks
2	1-ton stake bed truck (Crew)
1	20' secure storage container for materials
3	Mini-excavator (11,000 lb.) & (7,000 lb.) rubber tracked
3	Track skid steer loader
1	1,500 to 2,000 gallon water truck
1	Vibratory plate compactor
7	5 or 6 yard single axle dump trucks
1	Connex box (40ft)
1	Office trailer (20ft)
4	6 ton & 10 ton equipment tag trailers
1	3.5 cyd wheel loader
1	Walk behind bobcat

As the nature and intensity of site activities changes, additional equipment may be mobilized with the consent of the EPA TOCOR.

The Chemours property is anticipated to have one crew consisting of 1 operator, 1 clean up technician, and two truck drivers. Other personnel may also be on site.

4.0 PROJECT DOCUMENTATION AND MEETINGS

A site orientation meeting will be held with all crew members on the day of mobilization. The primary focus of the meeting will be a comprehensive review of the Site Health & Safety Plan (HASP) and a site familiarization walk through. All crew members will acknowledge the HASP by signature.

All crew members, subcontractors, and visitors will be required to sign in and out each day on the Site Log. A daily safety/operations meeting will be held each morning, at the Chemours Property, with the crew to review the planned activities for the day, relevant AHAs and solicit crew feedback. This meeting will be used to formally communicate changes in the HASP and other site specific plans to the crew. The covered topics and attendees will be documented on the Daily Tailgate Safety Form.

A file will be maintained for the Chemours Property. Included in the file will be:

- Property Access agreement
- Pre-remediation documentation
- Post-remediation documentation
- Post restoration punch list

Daily Work Orders (DWO) will be utilized to document EPA authorized activities and resources. The DWO will also track progress towards completing the authorized activities. A draft DWO will be generated daily by the RM for the following days planned activities.

An afternoon Work Order meeting will be held between the RPM, RM and other participants as determined by the RPM. In this meeting the activities for the day and the planned activities for the following day will be reviewed. This meeting will also be the forum to discuss any other outstanding issues.

1900-55's will be generated daily to track project costs. Costs will be tracked by property in RCMS using subtasks. The 1900 for the previous day's activities will presented to the EPA TOCOR for review by 11:00 am.

5.0 SCHEDULE

The TO period of performance is 09/06/17 to completion as yet to be determine, the Task Order was issued as a verbal. Removal activities are scheduled to begin on September 26, 2016. Equipment and materials will be mobilized during the week of September 26, 2016 and the laydown yard will be established during this week. The support crew will mobilize during the week of September 19, 2016, the excavation crew will mobilize on September 26th and the backfill crew will mobilize on September 27th and 28th. It is anticipated a second excavation crew will mobilize October 3, 2016. Excavation will begin on the afternoon of September 30th.

The standard work week will be Monday through Saturday with the crew working approximately 60 site hours.

Excavation, backfilling and restoration of the 19 properties are estimated to run from 9/26/16 through 11/18/16.

6.0 PRE-MOBILIZATION ACTIVITIES

6.1 PRE-MOBILIZATION SITE VISIT

No site visit is needed as EPA and ER are already onsite having conducted a preliminary visit. ER will conduct a walkthrough of the Chemours property to define the areas that will be used during the project.

6.2 PLANS

A Site Specific Health and Safety Plan (HASP) will be developed jointly by ER and Tetra Tech (START) and approved by USEPA. The plan will be approved prior to the commencement of site activities. A Work Plan (contained herein) & Traffic Management Plan noting general haul routes will be developed by ER and submitted to EPA for review and approval. All Plans developed for this project will be amended, as site conditions warrant, with the approval of EPA.

6.3 FIELD SAMPLING & LABORATORY ANALYSIS

ER will sample and analyze backfill & topsoil sources and submit results of this analysis to EPA for approval prior to importing this material. The backfill and topsoil will be analyzed for those constituents listed in Table 2 of the Final Remedial Design for High Priority Zone 3 properties (as conducted by SulTRAC September 15, 2016).

The backfill and topsoil will be sampled at a frequency of 1,000 tons per sample or from each new borrow source.

7.0 MOBILIZATION AND SITE SETUP

7.1 STAGING AREA SET-UP

Prior to staging soil ER will construct a 100'X80' staging area. The staging area will be lined with a layer of 10ml poly sheeting, to create a definitive barrier between the clean soil and the existing surface of the property. Poly sheeting will be anchored with landscaping staples and clean fill. After installation of the poly sheeting, clean fill will be utilized to protect the sheeting. Silt fence will be erected around the staging area. Straw wattle may also be used where necessary. During non-working hours silt fence will enclose the staging area. During working hours, a portion will be removed to allow equipment access to stockpiles. The staging area will be enclosed at the end of each work day. In the event of heavy rainfall, the staging area will be enclosed and monitored.

At this time, it is anticipated some haul road improvements may be needed. Two- inch minus rock may be utilized to improve existing roads in anticipation of precipitation events.

7.2 FIELD OFFICE AND TEMPORARY UTILITIES

Site setup activities will be conducted in level "D" PPE unless otherwise specified in the HASP.

Field Office Facilities – ER will rent an office trailer for use by ERRS and a trailer for use as a breakroom/lunch room. Signs will be put up to identify the EPA and ERRS offices and direct visitors to sign-in at the office.

Laydown Yard – ER will utilize open land at the Chemours Company property at 5215 Kennedy Ave. as to be negotiated by EPA to store clean equipment and clean materials during the project. This location will also be used as a stockpile location for backfill and excavated soil.

Electrical – The field offices will be powered by existing power drops installed connecting the office trailers to municipal power.

Potable Water – Bottled water will be provided to the crew.

Sanitation – 3 portable restrooms and a hand wash station will be stationed at the Chemours Property for use by the crew. Additional restrooms and hand wash stations will be located at the office site. The portable restroom will be serviced at a minimum weekly.

Phone/Internet –Cell phones and cellular hot spots will be used to provide phone and internet service. Each contractor will provide cell phone and hot spots for use by their personnel.

8.0 REMOVAL ACTIVITIES

8.1 SITE PREPARATION & WALK THROUGH

The location will be thoroughly photo documented prior to beginning any activity. The property will be walked with ER's Project Manager, EPA and START to review site conditions. Site specific hazards will be discussed such as overhead wires or restricted access to staging area. Prior to stockpiling activities.

8.2 TRAFFIC & PEDESTRIAN CONTROL

Traffic control will be conducted using signs notifying traffic of trucks entering and leaving the highway. A spotter will be used when backing up the dump trucks at each location. A traffic control plan has been developed for trucks entering and leaving the Chemours property.

8.3 DUST & SOIL CONTROL

Water may be sprayed onto the staging area to control dust. Water will be delivered from a water truck. Water will be sprayed utilizing spray bars or side cannons. A hydrant meter/ backflow preventer will be rented from the City of East Chicago. A water truck may be used on the stockpile or the haul roads to minimize dust on the site.

Trucks will be inspected and brushed clean after loading and unloading to ensure that no soil is present outside of the bed of the truck. Trucks hauling excavated soil and backfill will be tarped.

8.4 BACKFILL

Backfill and topsoil will comply with the specification outlined in The Final Remedial Design for High Priority Zone 3 Properties (SulTRAC September 15, 2016). Clean backfill will be delivered from the borrow source to a stockpile located at the Chemours Company property on Kennedy Ave. From Chemours the fill will be trucked to each property using the 5-7 yd3 dump trucks. The backfill stockpile and topsoil will be managed

utilizing a front end loader and 5-7 yd3 dump trucks. It is anticipated backfill and topsoil will be delivered utilizing 40 yd3 end dumps.

It is estimated that 2800 yd3 of clean fill will be stored at the site.

8.5 RESTORATION

Following staging activities, restoration crew will remove silt fence and poly sheeting from the staging area. Punch list items will be completed in preparation for the demobilization. Any features that were removed will be replaced as directed by the EPA TOCOR.

9.0 WASTE MANAGEMENT

9.1 ANTICIPATED WASTE STREAMS AND WASTE STREAM SAMPLING

ER anticipates the following waste steams:

- General trash & debris

A small 2-yd3 or 3-yd3 dumpster will be placed at the office trailer location for general trash. General trash and debris will be moved to the dumpster for disposal.

9.2 RECYCLING AND REUSE

ER along with EPA and START will recycle paper, plastic and metals generated in the Site field office.

10.0 SITE SECURITY (SITE SECURITY PLAN)

Private security will be hired to monitor the laydown yard during all non-working hours. All equipment, hand tools, materials and miscellaneous supplies will be returned to the laydown yard at the end of each workday. Small tools and supplies will be locked up in the equipment trailer or storage box during overnight hours. The field office will be locked during non-working hours and when unoccupied during the day.

During working hours, all visitors to the site will be directed to sign in on the site entry/exit log maintained in the field office at the Chemours property. An entry/exit log will be maintained to track all personnel onsite. Visitors/observers will be kept out of the work areas while site activities are underway and should be escorted at all times. Trespasser(s) should be asked to leave work areas and the local police should be notified if the trespassers fail to comply. In the event trespasser(s) enter work areas, work should immediately cease, workers should exit the area, and the EPA TOCOR should be notified. Work should not restart until the trespasser(s) have left the site.

10.0 ENVIRONMENTALLY FRIENDLY PRACTICES

ER will attempt to employ environmentally friendly practices consistent with the prime contract during the execution of this task order. Where cost is increased by adherence to these practices, the EPA TOCOR will be consulted prior to incurring the additional cost. These practices include, but are not limited to the following:

- Utilizing environmentally conscious hotels
- Utilizing alternative fuels
- Carpooling
- Utilizing green office supplies
- Recycling plastic, paper and metals generated onsite
- Exploring the beneficial reuse of wastes generated onsite
- Procurement of goods and services from local vendors
- Institution of a no-idle policy for heavy equipment and vehicles

ATTACHMENT A

PROPERTY DESIGN SHEETS