718 3rd Street, Eureka, CA 95501 USA GHD.com



Our ref: 12621392

08 November 2023

Netra Khatri City of Arcata 736 F Street Arcata, CA 95521

Proposal for Environmental Services for Implementation of the Little Lake Industries Site Cleanup Plan

Dear Netra Khatri:

GHD is pleased to provide this proposed scope of work and fee for implementation of the Little Lake Industries Site Cleanup Plan (SCP). It is our understanding that the City has acquired Brownfield Site Cleanup Funds through the Environmental Protection Agency (EPA) and has requested that GHD provide this scope of work for environmental services. The site cleanup will occur at Little Lake Industries located on South I Street in Arcata, California.

GHD's team includes project Director and senior Environmental Planner Andrea Hilton, who currently provides environmental services to the City on many other projects. project Manager Mindi Curran is a licensed Professional Geologist (PG) in California, is 40-hour Hazwoper Certified, and has previously performed work on the Little Lake Industries (LLI) Site. Prior to transitioning to GHD, Mindi Curran was in SHN's Environmental Department and assisted with many of the LLI Site Assessment activities as well as preparation of the Site Cleanup Plan.

GHD's team for this project have experience coordinating site remediations and closures with the North Coast Regional Water Quality Control Board (NCRWQCB). This experience includes development of work plans, site assessment, and remediation implementation on a variety of sites. These sites include brownfields, historic underground storage tanks (UST), former manufacturing facilities, and former lumber mills. In addition, GHD has experience working with other agencies regarding site assessment, including the Department of Toxic Substances Control (DTSC) and the EPA. This experience along with the project familiarization discussed above ensures that GHD can provide an excellent working relationship with the NCRWQCB for this project.

1. Project Understanding

There have been many environmental investigations on the property with the goal of identifying legacy contamination issues. These investigations are detailed in the 2020 Site Cleanup Plan prepared by SHN. In recent years, the City of Arcata was awarded Brownfield Site Assessment funds to perform additional environmental sampling and testing and to develop the SCP. Most recently, the City has been awarded Brownfield Site Cleanup Funds for implementation of the SCP. This scope of work is to complete the site cleanup activities outlined in the SCP.

The LLI property is located along I Street in the City of Arcata and is comprised of 12 acres that are bordered by a creek, slough, paved space, and commercial Property. Historically the property was occupied by LLI and was referred to as the "South I Street Mill". The property is comprised of two parcels at

→ The Power of Commitment

46 South I Street and the Johnson Tract parcel, which is located across I Street. This site cleanup excludes the Johnson Tract property. The City of Arcata currently own all three parcels.

The site was primarily used for timber-related operations from 1950 to 1988. This included a remanufacturing complex, kilns, maintenance shed, boiler building, drying shed, conical burner, and office building. The City of Arcata acquired the property in 2001, and all structures were demolished by 2010. Contaminants of concern at the site include dioxins and furans, heavy metals, and total petroleum hydrocarbons as motor oil and diesel.

2. Scope of Services

Task 1: Project Management

This task includes project management duties such as coordination with the City of Arcata and contractors, communication with regulators, monthly invoicing, and project meetings. GHD anticipates the following project meetings, in addition to regular project correspondence:

Kickoff meeting – Prior to proceeding, GHD will participate in a virtual kickoff meeting with the City of Arcata to review project details. The purpose of the kickoff meeting is to define the schedule, confirm the approach, and identify project priorities.

Up to four (4) project update meetings – GHD will participate in up to four project update meetings with the City of Arcata and any project Stakeholders that the City may ask to be present. These project update meetings are assumed to be in addition to regular project correspondence.

Deliverables:

- Kickoff meeting notes with action items
- project update meeting notes with action items
- Monthly invoices

Assumptions:

- The kickoff meeting is assumed to be 1-hour in length.
- Project update meetings are assumed to be 1-hour in length.
- Any additional stakeholder meetings will be covered under a contract amendment.

Task 2: Excavation, Soil Characterization, Backfilling

Task 2 includes the site cleanup activities prior to waste transport and disposal. These activities include review of the relevant documentation, excavation and stockpiling of contaminated soil, soil sampling within the excavation boundaries, stockpile characterization for disposal and backfilling of the excavation. Each of these sub tasks are discussed in further detail below.

Task 2.1 Review Existing Studies and Cleanup Plan

Review of the Brownfield Site Assessment Reports of Findings, Site Cleanup Plan, and grant documentation will occur prior to implementation of the plan.

Deliverables:

No deliverables – this task informs subsequent tasks.

Assumptions:

- The City will provide GHD with electronic copies of the above mentioned reports.

Task 2.2 Excavation and Stockpiling of Contaminated Soil

As described in the SCP, soil is planned to be excavated from an area parallel to I Street that is approximately 170 ft long and 30 feet wide (at the widest point). The depth of the excavation is planned to be 3 to 4 feet below ground surface. It is estimated that approximately 460 cubic yards of material will be removed during excavation, however this volume could be more depending on the results of the confirmation soil sampling. Soil is planned to be excavated using a backhoe or excavator and stored in onsite stockpiles. Stockpiles will be placed on 6-mil Visqueen and covered with Visqueen at the end of each day.

GHD will provide the following services during excavation and stockpiling of contaminated soil:

Pre-construction site meeting: GHD will meet the City of Arcata and contractor for an onsite preconstruction meeting at least one day prior to excavation beginning. The pre-construction meeting will be used to review site safety, identify and prepare stockpile locations, and review site security regarding public access restrictions.

Excavation oversight: GHD will provide a staff member to oversee excavation and stockpiling activities to ensure the excavation boundaries in the site cleanup plan are achieved and that stockpiles are formed and maintained following best management practices (BMPs). The GHD staff member will be 40-hr Hazwoper Certified and will either be a licensed professional (PE or PG) in California or will be under the direct supervision of a licensed professional in California.

While stockpiles are maintained on site, GHD will provide a staff member to do weekly stockpile inspections to ensure that stockpiles are appropriately covered and remain undisturbed on site until transport and disposal.

Deliverables:

 Daily field logs, excavation and stockpiling documentation, and acknowledgement of site safety procedures. Provided in the Final Report of Findings.

Assumptions:

- The pre-construction site meeting could take up to 4 hours.
- The City will contract directly with a general contractor to perform the excavation and stockpiling activities.
- GHD will not be responsible for preparing the contractor bid package.
- The general contractor will be responsible for any necessary traffic and site controls.
- The City will acquire any necessary permits for excavation activities.
- The stockpiles will be stored onsite.
- Excavation of the 460 cubic yards of soil and properly storing/covering the stockpiles could take up to 3, 8-hour workdays.
- Weekly stockpile inspection and fixing/repairing of covered visqueen could take up to 2 hours per week for 8 weeks.
- The contractor or City will be responsible for site repairs (e.g., replacing the fence, grading).
- GHD will not be responsible for preparing a Site Safety Plan.

Task 2.3 Soil Sampling Within Excavation Boundaries

Upon completion of the excavation activities, soil samples will be collected from the excavation sidewalls and floor and submitted for laboratory analysis. Confirmation soil samples will be collected from inside the excavation at the fourteen locations shown on Figure 6 of the SCP. Two composite samples will also be taken from the stockpiles, which is further described in Task 2.4. Confirmation soil samples will be submitted to McCampbell Analytical Laboratories and tested for dioxins and furans by EPA Method 1613 B, as outlined in the SCP.

GHD will correspond with the laboratory to receive laboratory provided sample containers, ice chests, chain of custody documentation, and to coordinate shipping.

GHD will provide a staff member to collect the confirmation soil samples. The GHD staff member will be 40hr Hazwoper Certified and will either be a licensed professional (PE or PG) in California or will be under the direct supervision of a licensed professional in California. The staff member will be trained in environmental sample collection and appropriate sample collection methodologies.

Deliverables:

 Daily field logs, sampling documentation, chain-of-custody documentation. Provided in the Final Report of Findings.

Assumptions:

- Coordination with the analytical laboratory, preparation, sample collection (including within the
 excavation and the stockpiles), chain of custody, and packaging and shipping could take up to 2, 8hour workdays.
- The excavation will not exceed 5 ft in depth at any location, therefore not requiring sheeting/shoring or special egress routes.
- The City will contract directly with the analytical laboratory.
- Shipping costs for 1 ice chest, overnighted to the laboratory, is included in this estimate.
- This scope of work does not cover additional sample collection should analytical results suggest that the excavation should be expanded.

Task 2.4 Stockpile Characterization for Disposal

Stockpiled material will be tested for disposal characterization on a frequency of one composite sample (4point) per 250 cubic yards. This equates to two samples being collected from the stockpiles. It is assumed that the stockpiles will be sampled at the same time the excavation pit will be sampled. The time for a GHD staff member to sample the stockpiles is included in the task above because it will occur at the same time as the other sampling. Therefore, the effort budgeted under this sub task is for disposal facility coordination as discussed below.

The designated receiving facility will require specific analytes be tested for disposal characterization. There are several analytes listed in the SCP that are anticipated to be required. However, given that the SCP was prepared three years ago, there is potential that the receiving facility that was originally consulted has updated or changed their required analyte list and analyte concentrations. Thus, it is recommended that the disposal facility be consulted prior to determining the final analyte list for disposal characterization.

GHD will coordinate with the disposal facility to receive their updated analytical and waste characterization list. It is assumed that the disposal facility will want to review some of the available analytical data and meet to discuss the volume and anticipated contaminant concentrations. Following receipt of the stockpile analytical data the results will need to be shared with the disposal facility to determine if any additional testing is required. For example, if lead is detected above a specific threshold the samples may need to be run for leaching potential.

Deliverables:

- Coordinate and provide necessary analytical documentation to the disposal facility.

Assumptions:

- Coordination of the appropriate analyte list, discussing the analytical results with the facility, and coordinating transportation and disposal scheduling could take up to 24 hours of time.
- Time budgeted under this task does not include time needed to sample the stockpile(s) as that will
 occur with the other sampling and therefore is included in Task 2.3 above.

Task 2.5 Excavation Backfilling and Compaction

The excavation area will be left open pending receipt of the confirmation soil sampling analytical results. Once the analytical results suggest that all contaminated material has been removed from the excavation, then the excavation will be backfilled using clean, river-run gravel or other clean fill material and will be compacted. GHD will provide oversight for the delivery of clean fill material to the site, backfilling of the excavation, and compaction of the clean fill material. The volume of clean fill material is anticipated to be on the order of the same volume that was removed from the excavation. Although the City will contract directly with the fill provider and contractor, it is anticipated that GHD will provide oversight and coordination for this task.

Deliverables:

- Daily field logs, fill delivery documentation, site photographs. Provided in the Final Report of Findings.

Assumptions:

- Delivery of the clean fill material, backfilling, and compaction could take up to 3, 8-hour workdays. This
 will vary based on the size of the delivery truck and the number of trucks delivering to the site.
- The City will contract directly with the company providing the clean fill material.

Task 3: Waste Transport and Disposal

Task 3 includes waste transport oversight.

Task 3.1 Offsite Transport and Disposal of Impacted Soil

Following disposal characterization, the waste soil will be transported to the disposal facility. The SCP estimates that approximately 30-34 truckloads (assuming a truck that can carry 18 cubic yards per load) will be necessary to remove the material from the site. Each truck will need to be certified to transport hazardous waste and possess a manifest of the material during hauling to the disposal facility.

GHD will provide oversight during loading of the trucks and will keep record of the manifests for each truck. A folder containing manifest for each load will be provided to the City once all of the material has been removed from the site.

Deliverables:

 Daily field logs, manifests, chain-of-custody documentation. Daily field logs provided in the Final Report of Findings. Manifests provided to the City following transportation of materials offsite.

Assumptions:

- Each truck will take approximately 1 hour to load and document appropriately.
- The City will contract directly with the disposal facility.
- The City will contract directly with the trucking/hauling company.

Task 4: Report of Findings and Request for Site Closure

A draft Report of Findings for the excavation and disposal of impacted soils will be submitted to the City for review within 45 days of the removal of the soil stockpile (i.e., within 45 days of transport/disposal of all impacted soil from the site). A Final Report of Findings will be submitted within 90 days of the removal of the soil stockpile. The report will include the summary of excavation activities, analytical results of the confirmation soil sampling within the soil pit, analytical results for the stockpile sampling, soil transport and disposal documentation, and a description of the backfilling operations.

Following delivery of the Report of Findings, GHD assumes that coordination with the State Water Board will be required for site closure. This often requires a letter that formally requests site closure and/or no further action. GHD anticipates that site closure will require a 1-hr meeting with the Water Board to review the site cleanup activities and discuss the Report of Findings. Following the meeting GHD will draft the closure letter and provide the letter to the City for Review.

Deliverables:

- One (1) draft Report of Findings (.pdf) submitted electronically to the City of Arcata for review and comment.
- One (1) final Report of Findings (.pdf) submitted electronically to the City of Arcata.
- One, 1-hr Closure Coordination Meeting with the City of Arcata and RWQCB.

- One (1) draft Request for Closure Letter
- One (1) final Request for Closure Letter

Assumptions:

- GHD will receive one set of consolidated comments from the City for the draft Report of Findings and Request for Closure Letter.
- GHD will receive the City of Arcata's review comments for the draft Report of Findings within three weeks of the receipt of the draft.

3. Fee Summary and Schedule

GHD will perform the scope of services on a cost plus to a max with a total fee tabulated in Table 1, which will not be exceeded without formal authorization provided by the City. GHD may transfer unused budgets across tasks, provided that the total fee is not exceeded. GHD is prepared to begin work on this project following notice to proceed from the City. A schedule outline is presented below.

Table 1 Schedule Outline.

Task	Anticipated Schedule					
Task 1 – Project Management	Project Closeout – January 2025					
Task 2 – Excavation, Soil Characterization, Backfilling	May-July 2024					
Task 3 – Waste Transport and Disposal	August-September 2024					
Task 4 – Report of Findings	Draft estimated Mid-October 2024 Final estimated December 2024					
Site Closure Request	January 2025					

Table 2 Task Descriptions and Budget.

Task Description	Task Budget			
Task 1 – Project Management	\$14,736			
Task 2 – Excavation, Soil Characterization, Backfilling	\$31,759			
Task 3 – Waste Transport and Disposal	\$9,539			
Task 4 – Report of Findings	\$16,550			
Total	\$72,585			

* The fee above includes travel expenses that will be billed at cost.

* The fee above includes prevailing wage only for the construction inspector and environmental sampler. It is assumed that this project is not a FAR 10-H project and therefore does not need adjusted rates applied to all categories.

Regards

Mindi Curran, PG Project Manager, project Geologist

530-340-1327 Mindi.curran@ghd.com Andrea Hilton Project Direct, Senior Environmental Planner

707-443-8326 Andrea.Hilton@ghd.com

Copy to:



Little Lake Industries Site Cleanup Implementation

Description		BGL Ann Bechtel \$373.0	PD Andrea Hilton \$240.0	Project Manager/Geologist Mindi Curran \$210.0	Senior Engineer Patrick Sullivan \$235.0	Prevailing Wage - Construction Inspector Mindi Curran \$203.0	GIS Jesse Lopez \$200.0	Editor Veronic Chocholek \$190.0	Admin TBD \$195.0	Total Hours	Labor Total	Mileage	Shipping Costs	Total Subs	Estimated Project Total
Task1	Project Management	\$373.0 2	\$240.0 8	\$210.0 40	\$235.0	\$203.0	\$200.0 0	\$190.0	3195.0 14	68	\$14,736	\$0	\$0	\$0	\$14,736
	Project Management	2	8	40	4	0	0	0	14	68		\$0	\$0	\$0	\$14,736
Task2	Excavation, Soil Characterization, Backfilling	0	2	44	12	76	16	0	0	150		\$341	\$250	\$591	\$31,759
Subtask 2.1	Review Existing Studies and Cleanup Plan	0	2	8	8	0	4	0	0	22	\$4,840	\$0	\$0	\$0	\$4,840
Subtask 2.2	Excavation and Stockpiling of Contaminated Soil	0	0	8	2	32	8	0	0	50	\$10,246	\$260	\$0	\$260	\$10,506
Subtask 2.3	Soil Sampling within Excavation Boundaries	0	0	2	0	16	4	0	0	22	\$4,468	\$16	\$250	\$266	\$4,734
Subtask 2.4	Stockpile Characterization for Disposal	0	0	22	2	0	0	0	0	24	\$5,090	\$0	\$0	\$0	\$5,090
Subtask 2.5	Excavation Backfilling and Compaction	0	0	4	0	28	0	0	0	32	\$6,524	\$65	\$0	\$65	\$6,589
Task3	Waste Transport and Disposal	0	0	8	2	36	0	0	0	46	\$9,458	\$81	\$0	\$81	\$9,539
Subtask 3.2	Offsite Transport and Disposal of Impacted Soil	0	0	8	2	36	0	0	0	46	\$9,458	\$81	\$0	\$81	\$9,539
Task4	Report of Findings	0	6	56	6	0	4	6	0	78	\$16,550	\$0	\$0	\$0	\$16,550
	Report of Findings	0	4	40	4	0	4	6	0	58	+	\$0	\$0	\$0	\$12,240
Subtask 4.2	Site Closure	0	2	16	2	0	0	0	0	20	\$4,310	\$0	\$0	\$0	\$4,310
	Total Labor Hours	2	16	148	24	112	20	6	14						
	Estimated Project Total	\$746	\$3,840	\$31,080	\$5,640	\$22,736	\$4,000	\$1,140	\$2,730	342	\$71,912	\$423	\$250	\$673	\$72,585