1180 NW Maple St., Suite 310
Issaquah, WA 98027
T 425.395.0010
TRCcompanies.com

January 29, 2021

Mr. Joel Haack
Haack Brothers Homes
3922 87th Avenue NE
Marysville, Washington 98270

Re: Revised Additional Subsurface Investigation Work Plan
Legion Lots 1 through 6
413 and 419 Rockefeller Avenue
Everett, Washington

TRC Project Number: 424198.0000.0000

Dear Mr. Haack:

TRC Environmental Corporation (TRC) is pleased to submit this revised work plan to perform an Additional Subsurface Investigation (ASI) of the Legion Lots Haack Parcels located at approximately 413 and 419 Rockefeller Avenue in Everett, Washington (Site). The Site includes six separate tax parcels (i.e. Lots 1 through 6) of undeveloped land that was sold to Haack Brothers Homes (Haack Brothers) by the City of Everett. The general location of the Site is indicated on Figure 1.

The six lots are within the western boundary of a contaminated Model Toxics Control Act (MTCA) Site identified as the Legion Memorial Golf Course Site (Facility Site ID No. 9311679 and Cleanup Site ID No. 1653) by the Washington State Department of Ecology (Ecology). The source of impacts to that Site is airborne emission of arsenic from the former ASARCO Everett Smelter, which is considered a regional Site with broad impacts, much like the ASARCO Tacoma Smelter Site in Ruston, Washington. The regulatory mechanism for closure of the Legion Memorial Golf Course Site included the use of an Environmental Covenant (EC) that has been interpreted by Ecology as including the six parcels that comprise the Site. The Site is within an area designated as Zone C of the ASARCO Everett Smelter Site, which stipulates the frequency and type of sampling to be performed during environmental assessment.

BACKGROUND

The Site is currently enrolled in the Ecology Voluntary Cleanup Program (VCP) as Site No. NW3268. Ms. Glynis Carrosino is the Ecology project manager for the Site. It is important to note that the Site is a small part of the larger Legion Memorial Golf Course Site, which has undergone extensive assessment and has completed Ecology's Remedial Investigation/Feasibility Study (RI/FS) process and has achieved regulatory closure. As such, Lots 1 through 6 do not need to again go through the RI/FS process. Rather,

the additional work being performed by Haack Brothers is to maintain compliance with the prior EC and regulatory closure and seeks to assess additional actions that may be necessary to remove Lots 1 through 6 from the EC.

Additionally, the City of Everett previously allowed fill material from retention pond construction to be stored on the Legion Lots. Placement of this fill was inconsistent with the requirements of the EC and was not pre-approved by Ecology as required. The fill material was reportedly tested and was determined to be "clean" and was used as fill material in the Lowland portion of the Everett Smelter Cleanup Site. Significant amounts of fill remained on the Site covering the historical golf course surface grade. After removal of some of the fill, a contractor for the City of Everett collected three soil samples from around the area of the former fill stockpile. One of those samples, named "Site 3 (North)" contained concentrations of arsenic and lead exceeding applicable cleanup levels. Based on the limited available documentation, that sample appears to have been obtained from a location near the boundary of Lots 5 and 6. The sample location was not surveyed or referenced with any directions or distances from a fixed point. There is no documentation regarding sampling protocols or whether the samples were collected by a professional. There was no written report documenting any of the sampling procedures or results.

Environmental Partners, Inc. (EPI) [1], a TRC Company, completed a Targeted Subsurface Investigation of the Site in December 2019. The Targeted Subsurface Investigation included investigation of Lot 5 and Lot 6 to assess soil quality in native soil beneath the fill material placed by the City of Everett. Eight soil samples were collected at Lots 5 and 6 at the Site. Soil samples were collected and submitted for analysis of arsenic, cadmium, and lead by U.S. Environmental Protection Agency (EPA) Method 6020. All soil sample results were at concentrations less than the Ecology Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) for arsenic, cadmium, and lead.

TRC submitted an Additional Subsurface Investigation (ASI) Work Plan, dated, February 28, 2020. The ASI Work Plan summarized both the findings of the Targeted Subsurface Investigation to Ecology and proposed sampling procedures for the Lots 1 through 4. As part of this submittal TRC requested an opinion from Ecology through the VCP.

Ecology's opinion letter, dated, November 30, 2020, requested a broader scope of investigation of the Legion Lots Haack Parcels than presented in the ASI Work Plan. This revised ASI Work Plan incorporates those Ecology comments. Implementing this scope will be a minimum requirement for considering the Site fully characterized and in support of an eventual No Further Action (NFA) determination. If this revised ASI Work Plan does not identify impacts to soil at a concentration exceeding a CUL or action level, no additional investigation will be required. If soil impacts at concentrations greater than a CUL or action level are identified, it may be necessary to perform limited additional assessment or even remediation in order to obtain the NFA determination.

Ecology requested that the ASI Work Plan meet the sampling requirements referenced in Ecology's "Table 7-1: Residential Properties - Sampling Approach and Decision Rules" (Table 7-1). The Site is

[1] TRC acquired EPI on December 27, 2019. For the purposes of this document and project EPI and TRC may be used synonymously.

within the boundaries of Zone C of the Everett Smelter Plume Upland Area Sampling Zones. Ecology's opinion letter and the Everett Smelter Plume sampling requirements are included as Attachment A.

Table 7-1 requires five sampling locations in an area of 4,000 square feet or less. One additional sampling location is required for each additional 500 square feet. Each lot is 6,600 square feet and will require 10 sampling locations to meet the requirements of Table 7-1. This results in a total of 60 borings across the six lots in the general areas indicated on Figure 2. Boring locations may be adjusted slightly based on access and subsurface conditions but will generally provide "grid" based data for planning and estimating if remediation is required. Each grid square will represent approximately 660 square feet and each 1-foot depth within a grid square will represent approximately 24 cubic yards of soil.

ADDITIONAL SUBSURFACE INVESTIGATION

Soil Sampling

This task includes mobilization to the Site to advance 60 soil borings using direct-push technology (DPT) and collecting the necessary soil samples from Lots 1 through 6.

The 60 soil borings will be advanced to a total depth of 10 feet below ground surface (bgs). Soil conditions at each location will be logged using the Unified Soil Classification System with visual-manual procedures (ASTM Method 2488D).

Soil samples will be collected continuously using standard DPT methods. It is anticipated that up to two soil samples from the fill and two soil samples from the underlying native soil will be collected and submitted for analysis. If the fill material is less than 2-feet thick or nonexistent in some locations, fewer fill samples will be necessary.

In general, up to four soil samples will be retained and submitted for laboratory analysis from each boring. This will result in up to a total of 240 soil samples and 24 duplicate samples for a total of 264 samples for analysis. Ecology requires that 10 percent of samples be submitted as "blind" duplicates as a check on laboratory quality control.

At each location, two discrete soil samples will be collected from the fill at depths of 6 to 12 inches and 18 to 24 inches bgs. The placed fill at the Site was observed to be approximately 3.5 feet to 5 feet thick during the Targeted Subsurface Investigation. Additionally, two soil samples will be collected in the underlying native soils at depths of 0 to 6 inches and 18 to 24 inches below the fill-native soil interface. The samples from the fill material must be discrete, at the direction of Ecology. The samples from the native soils may be homogenized over the 6-inch sample interval before being placed within the sample containers.

Samples will be collected with single-use disposable equipment and placed directly into new, pre-labeled 4-ounce laboratory-supplied glass jars with Teflon lined lids. Filled sample containers will be placed in cooler with enough double bagged ice to maintain an internal temperature of 4 degrees Celsius or cooler.

All samples will be handled and transported under standard chain-of-custody protocols and submitted for analysis under standard 2-week laboratory turnaround time.

Laboratory Analysis

Samples will be labeled and placed into an iced cooler pending submittal to Friedman & Bruya, Inc. (FBI) Laboratories in Seattle, Washington. FBI is accredited by Ecology to perform the requested analyses.

Each of the 240 soil samples and 24 duplicate samples will be submitted for laboratory analysis of arsenic, cadmium, and lead using EPA Method 6020A under standard turnaround time. This analysis utilizes Inductively Coupled Plasma and Mass Spectroscopy (ICP-MS).

Laboratory quality assurance/quality control (QA/QC) procedures will include duplicate analyses, matrix spike, and matrix spike duplicates to evaluate both accuracy and precision of the laboratory methods. Analytical results that are outside of laboratory control limits will be flagged with an appropriate data qualifier and re-analyzed. Analytical data reports will include internal laboratory QA/QC results.

Health and Safety Plan

A project-specific Health and Safety Plan (HASP) for investigation activities is required by the Code of Federal Regulations (CFR) Title 29 1910.120 and by the Washington State Department of Labor and Industries and under Washington Administrative Code (WAC) 173-340-810. The HASP is a document that establishes site objectives, anticipates job hazards, provides implementation of a hazard communication and injuries/illness prevention program, and establishes policies and procedures to be followed in both routine and emergency situations.

The HASP for this project is presented in Attachment B.

Utility Locating

TRC will notify Washington One-Call Service to identify publicly owned subsurface utilities at the Site. The notification will be initiated a minimum of 3 business days prior to scheduled field activities. In addition, TRC will have a private utility locator clear each sampling location prior to advancing borings. TRC is not responsible for damage to utilities that cannot be located and are not identified.

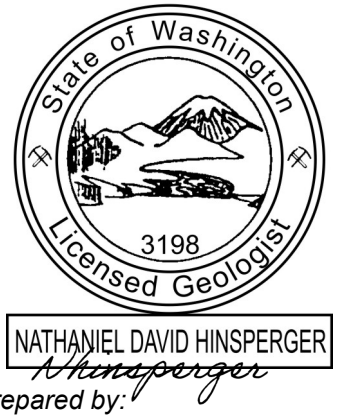
Investigation-Derived Waste

The proposed scope of services will generate investigation-derived waste (IDW) in the form of soil cuttings, excess soil cores, and decontamination water. Under current waste disposal regulations and laws, the landowner is considered the “generator” for those wastes. TRC is not the generator of these wastes and has no ownership or liability for those wastes. IDW will be placed in labeled drums and temporarily stored at the Site. The IDW will be profiled for disposal using the data obtained from analysis of the samples proposed herein. TRC will subcontract, on the generator’s behalf, for transportation and disposal of the IDW off-Site at an appropriate facility. The estimated costs for transportation and disposal

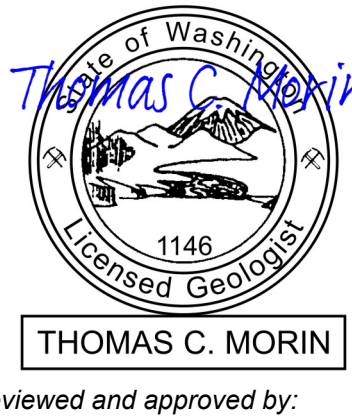
of wastes will be based on the analytical results and the accepting facility. The actual costs may vary from the estimated costs.

If after reviewing this revised ASI Work Plan you have any questions or need additional information, please feel free to call me at (425) 395-0010.

Sincerely,



Prepared by:
Nate D. Hinsperger, L.G.
Senior Geologist/Project Manager



Reviewed and approved by:
Thomas C. Morin, L.G.
Principal Geologist / PNW Area Leader

cc: Mr. Doug Steding, Northwest Resource Law (Counsel to Haack Brothers)

ENCLOSURES

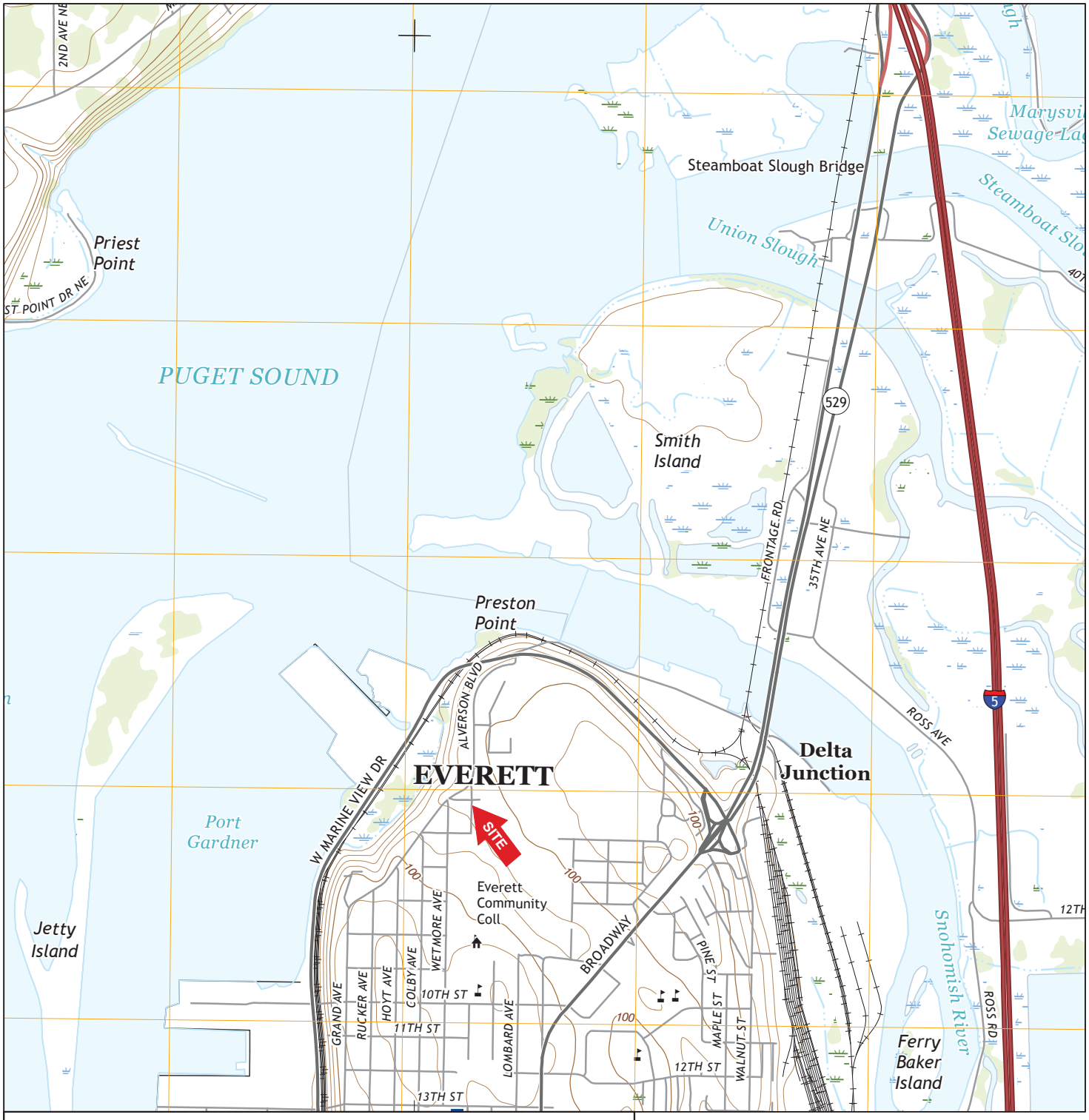
Figures

Figure 1	Site Vicinity Map
Figure 2	Site Representation Showing Proposed Soil Boring Locations

Attachments

Attachment A	Ecology Opinion Letter, November 30, 2020
Attachment B	Health and Safety Plan

Figures



NOTES:

APPROXIMATE SCALE (MILES)

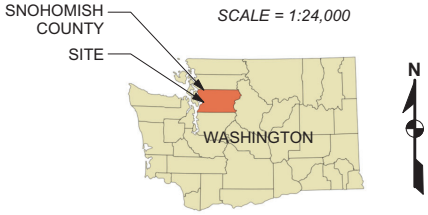
0 0.25 0.5 1

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

MARYSVILLE, WA, 7.5-MINUTE

LATITUDE: 48.0119 NORTH

LONGITUDE: -122.2050 WEST



SCALE = 1:24,000

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FIGURE 1
SITE VICINITY MAP

REPORT
ADDITIONAL SUBSURFACE INVESTIGATION WORK PLAN

PREPARED FOR
HAACK BROTHERS HOMES

LOCATION
LEGION LOTS
413 AND 419 ROCKEFELLER AVE
EVERETT, WASHINGTON

PROJECT NUMBER
424198

DATE 01/29/21
DRAWN BY ..... VPB
REVIEWED BY ..... NH

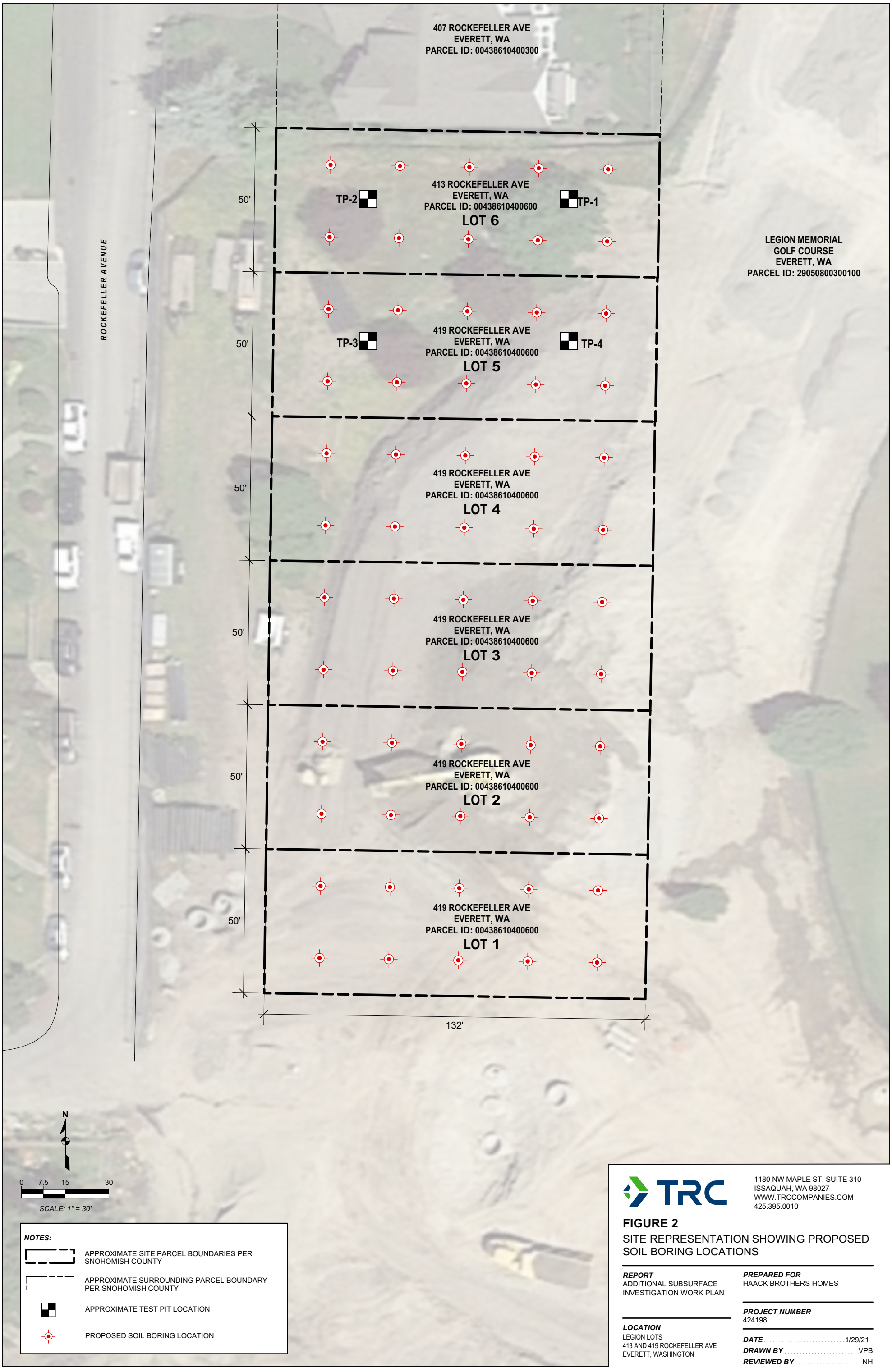

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FIGURE 2

SITE REPRESENTATION SHOWING PROPOSED SOIL BORING LOCATIONS

REPORT
ADDITIONAL SUBSURFACE INVESTIGATION WORK PLAN

PREPARED FOR
HAACK BROTHERS HOMES

LOCATION
LEGION LOTS
413 AND 419 ROCKEFELLER AVE
EVERETT, WASHINGTON

PROJECT NUMBER
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DATE 1/29/21
DRAWN BY ..... VPB
REVIEWED BY ..... NH

Attachment A
Ecology Opinion Letter
November 30, 2020

Electronic Copy

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-6341

November 30, 2020

Joel Haack
Haack Brothers Homes
3922 87th Avenue NE
Marysville, WA 98270
(joel@haackbrothers.com)

Re: Opinion Pursuant to WAC 173-340-515(5) on Remedial Action for the Following Hazardous Waste Site:

- **Site Name:** Legion Lots Haack Parcels
- **Site Address:** 413-419 Rockefeller Avenue, Everett, Washington, 98201
- **Facility/Site ID No.:** 9311679
- **Cleanup Site ID No.:** 1653
- **VCP Project No.:** NW3268

Dear Joel Haack:

The Washington State Department of Ecology (Ecology) received your request for an opinion on the *Additional Subsurface Investigation Work Plan Legion Lots 1 through 4 (Work Plan)* for the **Legion Lots Haack Parcels** (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Pursuant to implementation of the activities specified in the *Additional Subsurface Investigation Work Plan,* will the collected information assist in resolving Site characterization data gaps?

YES. Ecology has determined that implementing the Work Plan will assist in determining the effectiveness of the interim cleanup action and resolving identified data gaps. However, additional subsequent soil, soil gas, and possibly groundwater sampling and evaluation may be necessary to complete the evaluation of remedial action process.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Arsenic into the Soil.

Enclosures A and B include a detailed diagram of the Everett Smelter Plume sampling zones, and Table 7-1 (residential sampling).

Please note a parcel of real property can be affected by multiple sites. At this time, we have information that the parcels associated with this Site are affected by:

- Legion Memorial Golf Course NW2017 (Upland) 2008 Environmental Covenant institutional controls and restrictions

- Everett Smelter Plume upland areas soil sampling requirements (Zone C)

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. TRC Companies, *Additional Subsurface Investigation Work Plan, Legion Lots 1 through 4, 144 West Marine View Drive/419 Rockefeller Avenue, Everett, Washington,* dated February 28, 2020.

2. *Legion Memorial Golf Course – Property Sale Notification, Legion Lots 1 through 4, 144 West Marine View Drive/419 Rockefeller Avenue, Everett, Washington,* dated September 18, 2019.

3. Washington Department of Ecology, *Scope of Work, Task Work Assignment, Everett Smelter Uplands Project, Residential Sampling,* Fiscal Year 2018-2019.

4. *Legion Memorial Golf Course (Upland) Environmental Covenant; Recording Number 200812050469; Recording date 12/5/2008.*

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by completing a Request for Public Record form (https://www.ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests) and emailing it to PublicRecordsOfficer@ecy.wa.gov, or contacting the Public Records Officer at 360-407-6040. A number of these documents are accessible in electronic form from the Site web page (https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1653).

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis and Opinion

Based on a review of supporting documentation listed above, **Ecology has the following comments:**

Site Characterization

- Your characterization of the Site documented impacts to soil related to historical particulate emissions releases from the former ASARCO smelter facility. The soil was found to be impacted with varying concentrations of arsenic which exceeded MTCA Method A cleanup levels. The Site is within the boundary of the upland portion of the Everett Smelter Plume Cleanup Site. The Everett Smelter Plume Cleanup Site is divided into three zones for soil sampling protocols: Zone A, Zone B and Zone C. The Site, which consists of Lots 1 through 6, is located within Zone C.

- Fill material from a City of Everett retention pond construction project was stored on the Legion Memorial Golf Course Lots. The original land surface on the Property was leveled and up to approximately 5 feet of fill material was placed on the Property. Prior to disposal, the excess fill material was tested and determined to contain arsenic that was either non-detectable or below MTCA Method A cleanup levels. Three soil samples were later taken around the stockpile. No information was provided whether samples were taken in or on the stockpile. One sample, near the boundary of Lots 5 and 6, contained concentrations of arsenic and lead above MTCA Method A cleanup levels.

  A targeted collection and analysis of eight samples of native soil (0 to 18 inches and 18 to 24 inches) beneath the fill in four test pits (TP-1 though TP-4) on Lots 5 and 6 was conducted in late 2019. These analytical data indicated that concentrations of arsenic, cadmium and lead either non-detectable or below MTCA Method A cleanup levels were present in the native soil.

- Additional assessment borings in the remaining Lots 1 through 4 are proposed in the Work Plan to further delineate native soil for arsenic, lead or cadmium contamination at the Site. Everett Smelter Plume Cleanup Site Zone C protocols should be followed.

  Soil samples collected in test pits of Lots 5 and 6 in 2019 were collected in native material at depths of 0 to 12 inches and 18 to 24 inches below the fill. The soil samples

proposed in the Work Plan will be collected from 0 to 6 inches and 12 to 18 inches below the fill. The Work Plan should indicate the reason for this difference in sampling interval depths.

Additional assessment borings should be added to the Work Plan for collection and analysis of the fill material (non-native soil) on the six lots to provide a complete Site characterization. If test pit samples show exceedances, deeper borings should be drilled into the native soil.

The Work Plan (page 3) states that representative material from a target sampling interval will be placed in a bowl and 'homogenized' with a spoon before being placed in a sample container. This procedure is the same as compositing the sample which Ecology does not accept. The soil samples need to be discrete. The samples should be collected directly from the test pit wall and placed in the sample containers.

Also, the Work Plan states that soil samples below depths of 4 feet in the test pits will be collected with a backhoe bucket. The Work Plan needs to describe how the backhoe bucket will be decontaminated between samples and test pits to prevent cross-contamination.

Regulatory Assessment

The Site is located in a mixed commercial and industrial area; Soil cleanup levels suitable for unrestricted land use are therefore applicable to this Site. For unrestricted land use, direct contact, either MTCA Method A or Method B cleanup levels can be used.

The MTCA Method A soil cleanup levels for unrestricted uses are appropriate (Table 740-1) to consider, and have been selected, with the standard point of compliance for direct contact throughout the Site to a depth of 15 feet below the ground surface (reference WAC 173-340-740(6)(d)). Method A cleanup levels for soil were established based on direct contact and the protection of ground water.

The MTCA Method A groundwater cleanup levels for unrestricted uses are appropriate to consider. Groundwater cleanup levels protective of ground water as a drinking water source are appropriate for this Site. The standard point of compliance for groundwater applies to this Site, which is throughout the Site, from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected by the Site.

Cleanup levels for air are based on protection of human health. MTCA Method B indoor air cleanup levels and MTCA Method B sub-slab screening levels are the appropriate

choice (MTCA Method A values do not exist). The standard point of compliance for air is in ambient and indoor air throughout the Site.

Everett Smelter Plume: The Legion Memorial Golf Course VCP #NW3268 is located within an area affected by Everett Smelter Plume emissions, and within the area designated as the Everett Smelter Uplands Project.

The Everett Smelter Site was established as a contaminated Site by Ecology in 1990, following the discovery of high concentrations of metals from the former ASARCO smelting facility. To date, this Site encompasses much urban development that was built both in and around the footprint of the former smelter facility. Ecology has divided the Everett Smelter Site into two investigation areas, the Upland Area and the Lowland Area, and has mapped the area into three zones: Zone A, Zone B and Zone C. The Legion Memorial Golf Course Site is located within Zone C.

The Everett Smelter Plume Upland Area Soil Sampling Zones (Enclosure A), and the Everett Smelter Table 7-1, Sampling of Residential Properties (Enclosure B) have been provided for your information.

Legion Memorial Golf Course (Upland) Environmental Covenant 200812050469 dated 12/5/2008: This Environmental Covenant (EC) is on the title report associated with the Legion Lots Haack Parcels Property. The EC stipulates various soil restrictions including: restrict land use, prohibit soil disturbance, ongoing maintenance of remedy, and prohibit removal or alteration of existing buildings. Ecology's legal council will evaluate whether to terminate or amend the EC for the six Legion Lots Haack parcels once an effective, final remedial action has been selected and implemented. If the existing EC is terminated, a new EC will need to be prepared to replace it and include any new identified restrictions.

Other Requirements

- Under Washington State Law (Chapters 18.43 and 18.220 RCW), hydrogeologic and engineering work must be conducted by or under the supervision of a licensed geologist, hydrogeologist, or professional engineer (PE) qualified to conduct the work. Any document containing geologic or engineering work must be submitted under the seal of such an appropriately licensed professional. Thank you for providing the seal of your licensed hydrogeologists as evidence of this certification in the reports submitted to Ecology for this Site.

- A Terrestrial Ecological Evaluation (TEE) has not yet been performed at this Site. The

TEE is necessary to meet substantive requirements of MTCA, to set cleanup levels that are protective of terrestrial species, and to determine an appropriate cleanup action.

- Electronic submittal of all sampling data into Ecology's electronic *Environmental Information Management* (EIM) database is a requirement in order to receive a final Ecology opinion for this Site. Note that all data must be uploaded into the Ecology EIM system upon submission of each report to Ecology. This allows the Ecology Site Manger to access data to check results or perform additional analyses with those data. Suzan Pool (email suzan.pool@ecy.wa.gov, or via telephone at 360-407-6692) is Ecology's contact and resource on entering data into EIM. The most recent EIM date submission for this Site was dated February 22, 2019.

- The final cleanup action selected for the Site must meet the minimum requirements specified in WAC 173-340-360(2).

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/vcp. If you have any questions about this opinion, please contact me by phone at (425) 495-5436, or by email at glynis.carrosino@ecy.wa.gov.

Sincerely,

Glynis A. Carrosino
Project Manager
Toxics Cleanup Program, NWRO

Enclosures: A – Everett Smelter Plume Upland Area Soil Sampling Zones
B – Everett Smelter Table 7-1, Sampling of Residential Properties

cc: Thomas Morin, TRC Companies, (TMorin@trccompanies.com)
Derek Threet, Ecology Assistant Attorney General, (derek.threet@atg.wa.gov)
Sonia Fernandez, VCP Coordinator Ecology (sonia.fernandez@ecy.wa.gov)

Enclosure A
Everett Smelter Plume
Upland Area Soil Sampling Zones

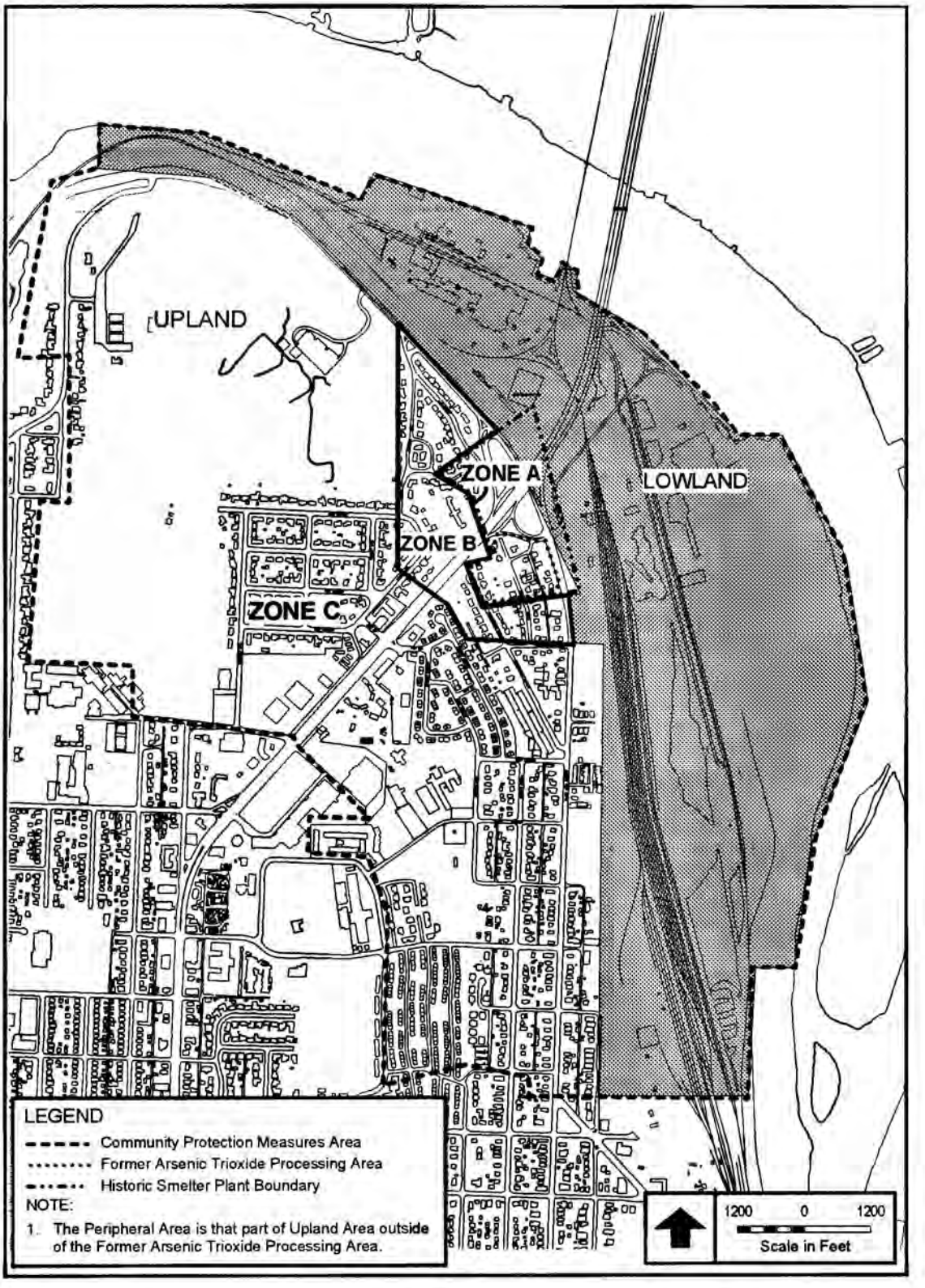


Figure 7-1: Upland Area Soil Sampling Zones.

Enclosure B
Everett Smelter Table 7-1
Sampling of Residential Properties

Legion Lots Haack Parcels in Zone C

Table 7-1: Residential Properties – Sampling Approach and Decision Rules

Zone A		Zone B		Zone C	
Decision Unit Size (ft^2)	**Number of Sampling Locations Per Decision Unit**	**Decision Unit Size (ft^2)**	**Number of Sampling Locations Per Decision Unit**	**Decision Unit Size (ft^2)**	**Number of Sampling Locations Per Decision Unit**
Less than 1,125	5	Less than 1,125	5	Less than 4,000	5
1,125 to 2,250	Add 1 per 225 ft^2	1,125 to 1,800	Add 1 per 225 ft^2	Greater than 4,000	Add 1 per 500 ft^2
2,250 to 4,000	10	1,800 to 4,000	8		
Greater than 4,000	Add 1 per 400 ft^2	Greater than 4,000	Add 1 per 500 ft^2		
Composite sampling, 6-inch depth intervals to 48 inches		Composite sampling, 6-inch depth intervals to 36 inches		Composite sampling, 6-inch depth intervals to 24 inches	

1. If arsenic concentration in any composite sample is greater than the cleanup level, property is identified as part of the site.
2. If arsenic concentration is above the cleanup level in the 0-6 or 6-12 inch depth intervals or above the applicable remediation level in depth intervals below 12 inches, property is identified as requiring soil removal to identified depth.
3. If composite results indicate potential for hot spots, conduct discrete sampling.
4. If arsenic concentration in any discrete sample is above the maximum allowable concentration at a given depth, remove soil to depth of exceedance.

Attachment B
Health and Safety Plan

1180 NW Maple St., Suite 310
Issaquah, WA 98027
T 425.395.0010
TRCcompanies.com

Health and Safety Plan

Site Name:	Legion Lots	
Site Address:	413 and 419 Rockefeller Avenue, Everett, Washington	
TRC Project Number:	015446	
Client:	Haack Brothers Homes	**Phone:** (425) 397-7360
Site Contact:	Joel Haack	**Phone:** (425) 397-7360
Client Health and Safety Representative:	N/A	**Phone:** N/A

Planned Activities:	**Location Within Site:**	**Dates:**
Utility locate, test pit excavation, drilling, soil sampling	Lots 1 through 6 at 413 and 419 Rockefeller Avenue	January through December 2021

Estimation of Hazards to TRC Personnel:

Arsenic, lead, and cadmium in soil, mechanical equipment, subsurface utilities, CoVid-19.

Physical Description of the Facility:

Vacant Site in residential neighborhood. Topography is generally flat with vegetative cover.

Operation Description of the Facility:

Vacant Site in residential neighborhood adjacent to golf course.

Facility Status:

Vacant properties in a residential neighborhood.

Hazard Assessment			
Chemical State:	☐ Liquid	☒ Solid	☐ Gas
	☐ Vapor	☐ Unknown	
Chemical Characteristics:	☐ Corrosive	☐ Flammable	☒ Toxic
	☐ Volatile	☐ Inert	☐ Other:

Describe Potential Chemical Hazards and Modes of Exposure	
Chemical Hazards:	Arsenic, lead, and cadmium in soil.
Potential Modes of Exposure:	Primary mode: Inhalation, Secondary mode: ingestion. Potential dust hazard during test pit excavation. Will monitor for dust during test pit excavation.

Potential Chemical Hazards						
Chemical Name	Action Levels			Exposure Route	Target Organs	Symptoms
	PEL	STEL	IDLH			
Metals						
Arsenic	0.002 mg/m^3	0.010 mg/m^3	5 mg/m^3	Inhalation, skin absorption, skin/eye contact, ingestion	Liver, kidneys, skin, lungs, lymphatic system	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation, hyperpigmentation of skin [potential occupational carcinogen]
Cadmium	0.005 mg/m^3		9 mg/m^3	Inhalation, ingestion	Respiratory system, kidneys, prostate, blood	Pulmonary edema, breathing difficulty, cough, chest tightness, sub sternal (chest) pain, headache, chills, muscle aches, nausea, vomiting, diarrhea, loss of sense of smell, emphysema, proteinuria, mild anemia, [potential occupational carcinogen]
Lead	0.050 mg/m^3		100 mg/m^3	Inhalation, ingestion, skin/eye contact	Eyes, gastrointestinal tract, CNS, kidneys, blood, gingival tissue	Weakness, exhaustion, insomnia, facial pallor, anorexia, weight loss, malnutrition, constipation, abdominal pain, colic, anemia, gingival lead line, tremor, paralysis, wrist, ankles, encephalopathy, kidney disease, irritation eyes, hypertension

Describe Potential Physical Worker Hazards:

Heavy equipment, slip, trip, and fall, cold stress, potential COVID-19 exposure (see COVID-19 attachments).

Potential Physical Hazards

☐ Heat Stress	☒ Cold Stress	☐ Explosion/Flammability
☒ Noise	☐ Confined-Space Entry	☐ Oxygen-Deficient Atmosphere
☒ Traffic or heavy equipment	☐ Heights	☒ Slip, trip, fall
☐ Overhead hazards	☐ Dust (non-toxic)	☐ Other:

Prevention of Physical Hazards		
Category	Cause	Preventive Measures
Head Hazards	Falling and/or sharp objects, bumping hazards.	Hard hats will be worn by all personnel at all times when working around overhead hazards and heavy equipment.

Foot/Ankle Hazards	Sharp objects, dropped objects, uneven and/or slippery surfaces, and chemical exposure.	Chemical resistant, steel-toed boots must be worn at all times on-site.
Eye Hazards	Sharp objects, poor lighting, bright lights (welding equipment), exposure due to splashes.	Safety glasses/face shields will be worn when appropriate. Shaded welding protection will be worn when appropriate.
Electrical Hazards	Underground utilities, overhead utilities, motors, electrical panels equip. and breakers.	Locator service mark-outs, visual inspection of work area prior to starting work.
Mechanical Hazards	Heavy equipment such as drill rigs, service trucks, excavation equipment, saws, drills, etc.	Competent operators, backup alarms, regular maintenance, daily mechanical checks, proper guards.
Noise Hazards	Machinery creating >85 decibels TWA, >115 decibels continuous noise, or peak at >140 decibels.	Wear earplugs or protective earmuffs.
Fall Hazards	Elevated and/or slippery or uneven surfaces. Trips caused by poor "housekeeping" practices.	Care should be used to avoid such accidents and to maintain good "housekeeping". Fall protection devices must be used when work proceeds on elevated surfaces.
Lifting Hazards	Injury due to improper lifting techniques, overreaching/overextending, heavy objects.	Use proper lifting techniques, mechanical devices where appropriate.
Lighting Hazards	Improper illumination.	Limit work to daylight hours or rent additional construction lighting.

Site Activity Considerations			
Will Client Site Representative be Present?	☐ Yes	☐ No	☒ Sometimes
Exact Locations of Chemicals:	☐ Known	☒ Assumed	☐ Unknown
Identify Nearest Off-Site Population:	☐ Rural ☐ Urban	☐ Industrial ☐ Commercial	☒ Residential

Monitoring Equipment

☒ PID	☐ FID	☐ Combustible gas indicator
☐ Colorimetric tubes	☒ Particulate meter	☐ Carbon monoxide meter
☐ H_2S/O_2 Meter	☐ Other (describe):	

Monitoring Action Guidelines

Instrument	Reading/Observation	Action Required
Particulate Meter	Observable dust	**Notify Project Manager to determine potential engineering controls**
	See Potential Chemical Hazards Section Above	**Evacuate all workers from work area. Notify Project Manager and Company Safety Officer**

Special Safety Considerations

If there is more than one level of hazard, or if there are multiple "sites" within a site, the hazards associated with each should be considered. A separate "Special Safety Considerations" section should be completed for each "site."

Work Location: Lots 1 through 4 at 319 Rockefeller Avenue

Objective of work at this Location: Test pit advancement, soil sampling

Level of Protection Planned: ☐ Level C ☐ Level D ☒ Level D-Modified (explain below)

Modifications to Level of Protection: Hard hat, safety glasses, steel toe boots, and hearing protection required when working near drill rigs or heavy equipment. DOT-approved safety vest required when working near vehicle traffic or heavy equipment. N95 or KN95 face mask worn when in the presence of other people for COVID-19 mitigation. Workers to travel in separate vehicles to maintain safe distancing. See COVID-19 attachments: CP052.1 COVID-19 Guidelines for Field Activities and TRC COVID-19 Questionnaire rev 23.31.20.

Types of PPE to be Used	
Foot	Steel-toed, steel shank boots. Rubber steel toed boots or rubber boot covers required if boot decontamination is warranted.
Hand	Double layer of nitrile gloves when handling potentially contaminated media, temperature-appropriate gloves for protection during cold weather.
Eye/Face	Safety glasses
Clothing	Temperature appropriate, long pants are required. Tyvek coveralls should be available to all on-site workers.
Respiratory	Based on monitoring requirements (full- or half-face respirator should be available to all on-site workers).
Additional Gear	Hardhat, earplugs, face shield, DOT-approved safety vest

Work Party

Name	Responsibility	Level of Protection
Wes Weisberg	Site Supervisor	Level D

Site Entry Procedure

Upon site arrival but before walking onto the property, send an email with the following information to the Project Manager and to onsite-iss@trccompanies.com:

- Property address
- Who is with you at the job site (if anyone)
- Description and license number of the vehicle you are using
- What time you anticipate leaving the property

When leaving the site for the day, send another email to the Project Manager and onsite-iss@trccompanies.com stating that you are off-site. The email can be as simple as: "It's 5:00pm and I'm leaving the property."

Criteria for Changing Personal Protection

Air monitoring threshold limits. When visible dust is noted.

Criteria for Implementing Engineering Controls:

When air monitoring threshold limits are exceeded.

Decontamination Procedures

Remove PPE and wash hands and face prior to eating or leaving Site. Eye wash kit, washing dermal with soap and water

Work Limitations (i.e., time of day, conditions, etc.)

Daylight hours only.

Placement of Disposable Materials

N/A

Placement of Investigation-Derived Residuals (i.e., drilling spoils, decon. water, purge/dev. water)

Test pit spoils will be placed back into excavation.

Location of Nearest:

Cellular Phone:	With TRC field representative
Running Water:	N/A
Public Road:	Rockefeller Road
Lavatory:	N/A

Emergency Planning

Service	Name	Number
Local Police:	Everett Police Department	911
Local EMS:	Everett Fire Department	911
Local Fire Department:	Everett Fire Department	911
Local Hospital:	Providence Medical Center	(425) 261-2000
Client Contact:	Joel Haack	(425) 397-7360

Site Phone Number:	Nate Hinsperger	(206) 851-3312
TRC Office (425-395-0010)	Douglas Kunkel	425-395-0016 office 425-241-8170 cell

Directions to Nearest Medical Facility (Map Attached):

The recommended route to Providence Medical Center is highlighted on attached map. The hospital is located approximately 0.9 miles from the site.

Approvals		
Title	**Signature**	**Date**
Site Safety Officer, Wes Weisberg		
Project Manager, Nate Hinsperger		
Company H&S Officer, TRC Safety Officer, Doug Kunkel		

Additional Site Personnel		
Printed Name and Company	**Approvals Signature**	**Date**

1180 NW Maple St., Suite 310
Issaquah, WA 98027

T 425.395.0010
TRCcompanies.com

Daily Safety Meeting

Date:	
TRC Project Number:	
Site Address:	
TRC Personnel Conducting Meeting:	

Known or Suspected Potential Hazards	**Personal Protective Equipment**
☐ Chemicals of Potential Concern	☐ Hard Hat
☐ Traffic (Vehicle and Pedestrian)	☐ Eye Protection
☐ Trips	☐ High-Visibility Clothing
☐ Falls	☐ Flame-Resistant Clothing
☐ Drilling Equipment	☐ Protective Footwear
☐ Excavation Equipment	☐ Coveralls
☐ Noise	☐ Hearing Protection
☐ Hot/Cold	☐ Respirator
☐ Utilities, Subsurface, and Overhead	☐ Exclusion Zone (Cones, Signs, Etc.)
☐ Other, Describe:	☐ Other, Describe:
Locations of Emergency Equipment	**Decon, Emergency Signals, Rally Point, Etc.**
☐ Fire Extinguishers	☐ Decon Procedures
☐ Eye Wash	☐ Waste Management
☐ First Aid Kit	☐ Hand Signals for Shutdown
☐ Nearest Medical Facility	☐ Audible Signals for Shutdown
☐ Potable Water	☐ Primary Rally Point
☐ Restroom	☐ Secondary Rally Point
☐ Equipment Shutdown Procedures	☐ Other Emergency Info, Describe:
☐ Other, Describe:	

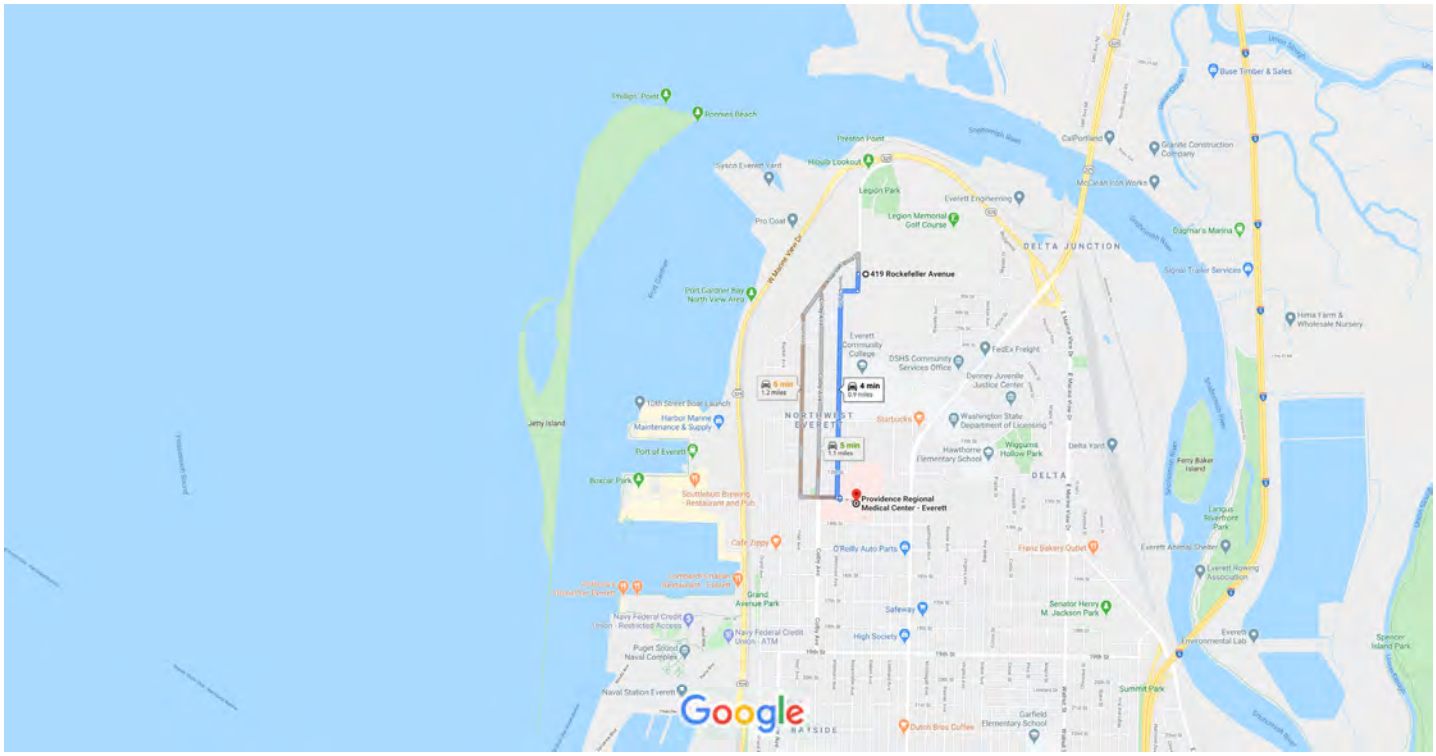
Persons Attending Safety Meeting

Name / Affiliation (Print)	**Time**
/	
/	
/	
/	
/	
/	
/	

Google Maps

419 Rockefeller Ave, Everett, WA 98201 to Providence Regional Medical Center - Everett

Drive 0.9 mile, 4 min



Map data ©2020 Google 1000 ft

419 Rockefeller Ave

Everett, WA 98201

1. Head south on Rockefeller Ave toward 5th St

322 ft

2. Rockefeller Ave turns right and becomes 5th St

315 ft

3. Turn left onto Wetmore Ave

0.7 mi

4. Turn left onto 13th St

56 ft

5. Turn right

Destination will be on the right

36 ft

Providence Regional Medical Center - Everett

1700 13th St, Everett, WA 98201

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

1. ASSESSING FIELD ACTIVITIES FOR COVID-19 RISK

Following TRC's health and safety management system, work activities should be assessed to identify possible hazards and the precautions necessary to mitigate risk to an acceptable level, including risks associated with COVID-19. TRC is following the US Occupational Safety and Health Administration's (OSHA) risk assessment guidance for COVID-19. Project-specific controls that are developed through the risk assessment process must be communicated to project employees and also listed in the project Health and Safety Plan.

1.1. Risk Assessment

To determine appropriate precautions, OSHA has divided job tasks into four risk exposure levels: very high, high, medium, and lower risk. The majority of TRC's work is considered Low risk.

- **Very High:** Exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures. Workers in this category include healthcare workers and healthcare or laboratory personnel collecting or handling specimens from known or suspected COVID-19 patients.
  - **Precautions:** TRC does not engage in Very High-risk work.
- **High:** Exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19. Workers in this category include healthcare delivery and support staff (e.g., doctors, nurses, and other hospital staff who must enter patients' rooms) exposed to known or suspected COVID-19 patients.
  - **Precautions:** TRC does not engage in High-risk work.
- **Medium:** Exposure risk jobs include those that require frequent and/or close contact with (i.e., within 6 feet of) people who may be infected with COVID-19, but who are not known or suspected COVID-19 patients. In areas without ongoing community transmission, workers in this risk group may have frequent contact with travelers who may return from international locations with widespread COVID-19 transmission. In areas where there is ongoing community transmission, workers in this category may have contact be with the general public (e.g., in schools, high-population-density work environments, and some high-volume retail settings).
  - **Precautions**
    - Continue to follow the CDC's guidelines for social distancing and hand hygiene.
    - Where appropriate, limit client and third-party access to the worksite or restrict access to only certain workplace areas.
    - Consider strategies to minimize face-to-face contact (e.g., drive through windows, phone-based communication, telework).

- Employees and Project Managers with medium exposure risk may need to wear some combination of gloves (i.e., nitrile), a face mask (or ½ mask tight-fitting respirator), and/or a face shield or goggles. PPE ensembles for workers in the medium exposure risk category will vary by work task, the results of the hazard assessment, and the types of exposures workers have on the job.

- **Lower:** Exposure risk (caution) jobs are those that do not require contact with people known to be, or suspected of being, infected with COVID-19 nor frequent close contact with (i.e., within 6 feet of) the general public. Workers in this category have minimal occupational contact with the public and other coworkers.
  - **Precautions** – While OSHA does not recommend specific controls for Low-risk work, TRC will continue to follow the CDC's primary precautions including social distancing and hand hygiene.

1.2. Best Practices

TRC has identified additional best practices that can be used to further mitigate potential exposure to COVID-19. In addition, the CDC's COVID-19 guidelines which include social distancing and hand hygiene, the following options should be considered.

- **Travel**
  - Drive in separate vehicles
  - Consider completing task alone
  - Have passenger sit in back seat
  - Sanitize your hands after using the fuel pump
  - Sanitize interior surfaces of rental vehicles
  - Driving instead of flying
- **Project Sites**
  - Use disposable chemical resistant gloves (i.e., nitrile) when disinfectant wipes are not available
  - Schedule work during "off hours" when less people are around
  - Wait until 3 days after last person left the area, if possible
  - Consider using a ½ mask tight-fitting respirator when N95 masks are not available (if deemed appropriate)
  - Contact clients via telephone or video conference instead of face-to-face meetings

- **Construction sites**
  - Avoid "tailgate meetings" or "water cooler meetings" without following social distancing protocols
  - Avoid sharing pens/pencils
  - Safety Meetings should be held in groups of 10 or less and should observe 6' personal distance
  - Stager lunch times to minimize social gatherings; consider eating in separate areas
  - All lunch waste, bottles and cans should be disposed of immediately after use
  - Never share PPE (hard hats, high visibility vets, personal floatation device, safety glasses, etc.
  - Avoid community coffee pots in field offices
  - Provide disposable paper cups at drinking stations
  - Wear gloves when operating equipment and if possible, limit one operator to a piece of equipment. Sanitize controls after use
  - No sharing hand tools
  - Set up hand cleaning or sanitizing stations at various locations on the site, ideally near port-o-lets
  - Put your clothing directly in the washing machine at the end of shift
  - Limit number of workers in confined spaces as much as possible
  - Use telephones or Skype meetings to avoid face-to-face meetings when possible

2. SYMPTOMS AND PRECAUTIONS FOR COVID-19

2.1. Background

The 2019 novel coronavirus, or COVID-19, is a new respiratory virus first identified in Wuhan, Hubei Province, China. It's called a "novel" — or new — coronavirus, because it is a coronavirus that has not been previously identified.

Both the COVID-19 and influenza (flu) are respiratory illnesses, which have similar symptoms. Both are contagious and both can be mild or severe, even fatal in rare cases. The key difference between the novel coronavirus and influenza is we know what to expect from the flu.

2.2. Symptoms of COVID-19

Initial symptoms of COVID-19 usually include fever greater than 100.4°F (38.0°C), cough, and shortness of breath. However, not all affected individuals will exhibit all symptoms. If you experience these symptoms or have been in recent close contact with someone with these symptoms, notify your doctor and stay home.

2.3. Steps to Follow If You Develop Symptoms

Symptoms and Warning Signs	**Take the following steps**
These symptoms may appear 2-14 days after exposure. • Fever, greater than 100.4°F (38.0°C) • Cough • Shortness of breath	1. Notify your field and direct supervisor that you feel ill. 2. Supervisor shall notify Office Practice Leader/Practice Leader, Mike Glenn (949-697-7418), and your HR Business Partner immediately. 3. Immediately isolate yourself and return to your place of lodging (return home if nearby). 4. Contact your personal healthcare provider asap (consider using the Cigna app) for evaluation and follow their instructions. 5. Update your field and direct supervisor of your health and work status (e.g., when do you expect to return to work). 6. If you're diagnosed with COVID-19 notify Mike Glenn (949-697-7418) and your HR Business Partner immediately. This communication will be treated as confidential.
If you develop any of the following **emergency warning signs:** • Difficulty breathing or shortness of breath, • Persistent pain or pressure in the chest, • New confusion or inability to arouse, • Bluish lips or face This list is not all inclusive so please consult with your medical provider for further guidance.	1. Get medical attention immediately. 2. If you're diagnosed with COVID-19, notify Mike Glenn (949-697-7418) and your HR Business Partner immediately. This communication will be treated as confidential.

Source: CDC COVID-19 Symptoms https://www.cdc.gov/coronavirus/2019-ncov/about/symptoms.html

2.4. Transmission

Both COVID-19 and the flu can be spread from person to person through droplets caused by an infected person coughing, sneezing or talking. Flu can be spread by an infected person for several days before their symptoms appear, and COVID-19 is believed to be spread in the same manner, but we don't yet know for sure.

2.5. Precautions

- Practice Social Distancing
  - Practice social distancing by avoiding large gatherings and maintaining distance (approximately 6 feet) from others when possible.
  - Do not share eating or drinking utensils, avoid close conversation, and other direct physical contact like hand shaking. "Close contact" does not include activities such as walking by a person or briefly sitting across an office.
- Hand Hygiene
  - According to the CDC, washing hands with soap and water is the best way to get rid of germs in most situations. If soap and water are not readily available, you can use an alcohol-based hand sanitizer that contains at least 60% alcohol. You can tell if the sanitizer contains at least 60% alcohol by looking at the product label.
- Practice good respiratory hygiene – covering mouth and nose when coughing or sneezing, using tissues and disposing of them correctly.
- Obtain immunizations recommended by healthcare providers to help avoid disease.
- Early self-isolation of those feeling unwell, feverish and having other symptoms of flu.
- Avoiding touching your eyes, nose or mouth.
- Frequently disinfect all areas that are likely to have frequent hand contact (like doorknobs, faucets, handrails).

2.6. Client Meetings/Interactions

Be aware of any restrictions or requirements that clients have in place regarding visiting client facilities or attending meetings. Verify with supervisor/project managers prior to visiting client facilities or meetings in person.

	TRC HEALTH AND SAFETY MANAGEMENT SYSTEM		EHS Policy Management System Procedures Compliance Programs Forms, Checklists, Permits, etc.
TRC	**DOCUMENT TITLE:** COVID-19 Questionnaire for Onsite Workers		
	DOCUMENT NUMBER: CP052.2	**Revision Number:** 2	
	APPROVED BY: Mike Glenn	Page **1** of **1**	

The safety of our employees and their families, subcontractors, clients, and visitors is TRC's highest priority. As the COVID-19 pandemic continues to evolve and spread, TRC will continue to monitor the CDC, WHO, and local agencies in order to provide up-to-date information to protect all of those in our community.

To prevent the spread of COVID-19 and reduce the potential risk of exposure to our employees, subcontractors, and visitors, we request all personnel involved with on-site project-related work complete this assessment questionnaire. This questionnaire will be completed upon arrival to the jobsite and prior to conducting any job-related tasks. Your participation is important to help us take precautionary measures to protect you and everyone on our team.

Date: _____

Name: _____

Company/Organization: _____

Email Address: _____

Phone Number: _____

Project Name: _____

1. Do you have signs of a fever or measured temperature above 100.4°F or greater, a dry cough, tiredness, or trouble breathing within the past 24 hours?
   ☐ Yes ☐ No
2. Have you had "close contact" with an individual diagnosed with COVID-19? "Close contact" means living in the same household as a person who has tested positive for COVID-19, caring for a person who has tested positive for COVID-19, being within 6 feet of a person who has tested positive for COVID-19 for 15 minutes or more, or coming in direct contact with secretions (for example, sharing utensils or being coughed on) from a person who has tested positive for COVID-19 while the person was symptomatic.
   ☐ Yes ☐ No
3. Have you, or anyone inside your residence been exposed to someone else who is currently being quarantined by a doctor or a local public health official?
   ☐ Yes ☐ No

Be aware that your client may have additional requirements as well. Please consult the COVID-19 Client Documents on TRCNet to review your client's guidance. Only personnel who answer "No" to all questions listed above will be granted site access. **Copies of completed questionnaires are to be maintained onsite with the HASP and project documents. If the answer is "Yes" to question 1, please contact your Supervisor, Office Practice Leader/OPL, Mike Glenn, and your HR Business Partner.**