

May 3, 2013 G-Logics File Number 01-0860-B

Mr. Tim Abell Pacific Housing NW LLC 229 Broadway East, Suite 21 Seattle, WA 98102

**SUBJECT:** Revised Workplan

**Phase II Environmental Site Exploration** 

ABC Supermarket Property 2500 Beacon Avenue South

Seattle, WA 98144

Dear Mr. Abell:

G-Logics Inc. is pleased to present this workplan to conduct a Phase II Environmental Site Exploration at the subject property. We understand that Pacific Housing NW LLC (PHNW) requires a review of subsurface contamination on the subject property resulting from former practices at the property and on adjoining properties.

Our workplan is based on our current knowledge of site conditions and our experience with similar projects. If a portion of this workplan does not meet the needs of PHNW, G-Logics stands ready to consider appropriate modifications including changes in scope, methodology, and scheduling. These modifications may result in changes to the risks borne by the PHNW and may require adjustments to our fees.

# **Background**

Identified activities include the former on-site location of an auto-repair shop (approximately 1940-1955) and the operation of a potential drycleaner on the adjoining

property to the south (Beacon Cleaners, 1951-1975). It currently is unknown if these activities resulted in soil, groundwater, or soil-vapor contamination on the subject property.

### **Proposed Scope of Services**

Based on the results of the recently completed Phase I Environmental Site Assessment for the property, we recommend the following activities to explore for the possible presence of soil contamination at identified suspected locations of the subject property. Please refer to Figure 2 for planned sampling locations.

#### **Soil Borings**

For the planned exploration, approximately five soil borings will be drilled in building-interior areas. These locations include the former auto-repair area and in the areas adjacent to the former cleaners previously located on the southern adjacent property (Figure 2). Actual boring locations will be identified upon completion of a utility locate and confirmation of access availability. Soil samples will be collected sampling equipment operated by G Logics (probe tooling and Roto-Hammer methods). Borings will be advanced to an anticipated depth of 5 to 6 feet below surface grade (or refusal). A G-Logics geologist will perform the growing and sampling work and will observe and document soil conditions.

#### **Soil Samples**

Collected soils will be visually reviewed for soil staining or discoloration. Samples of the soils will be periodically screened for the presence of volatile organic compounds by a photoionization detector (PID) with the vapor reading noted on our boring logs. A representative sample from each boring will be submitted for laboratory analysis, as presented on the Soil Analysis Table.

#### Soil -Vapor Samples

At the sampling locations located near the southern-adjoining property, temporary vapor probes will be installed and soil-vapor samples will be attempted. Collected vapor samples will be submitted for laboratory analysis, as presented on the Vapor Analysis Table.



### **Quality Assurance/Quality Control**

Quality Assurance/Quality Control (QA/QC) for the presented scope of work will include generally accepted procedures for sample collection, storage, tracking, and documentation. All sampling equipment will be washed and rinsed before the collection of the samples. All samples will be labeled with a sample number, date, time, and sampler name, and will be stored in an ice chest containing frozen "blue ice". Appropriate chain-of-custody documentation will be completed.

### **Report Preparation**

A report will be prepared and will include the findings of the Phase II exploration. The report will include site diagrams showing exploration locations, as well as current and identified former site features. Boring logs, laboratory analytical results, and a discussion of our findings also will be included. Analytical results will be compared to the cleanup levels Analytical results will be compared to the cleanup levels (Method "A" or "B" Cleanup Levels) set by Ecology under the Model Toxics Control Act (MTCA) Cleanup Regulation, dated November 2007.

## **Project Parameters**

The schedule and budget estimate for the exploration, as described above, is based on the following assumptions:

- Site access (interior and exterior) will be available to G-Logics personnel and all G-Logics subcontractors. Limited-access drilling equipment (Roto Hammer and Jackhammer equipment) can access the planned exploration locations within the building interior.
- During drilling and sampling, some disruption to the building occupants/customers will occur, including noise, dust, damage to the floor, etc. PHNW will facilitate receipt of the necessary permissions for this interior-sampling work.
- Drilling at off-property locations, including streets and right-of-ways, will not be conducted as part of this project.
- Hand-sampling equipment can be successfully used at this site, to the planned depth of 5 to 6 feet.
- On-site drilling and soil sampling will be completed within two five-hour days, each day starting prior to the store opening (5 AM to 10 AM). Based on the findings of our assessment, installation and sampling of additional borings may be prudent.)



- Drilling currently is scheduled for May 16 and 17, 2013.
- Approximately five soil borings will be completed.
- Groundwater.is not expected to be discovered within the planned exploration depth.
- Weekend work will not be required
- G-Logics will provide all sampling equipment and sample containers.
- G-Logics will provide two 55-gallon drums for containing soil cuttings and sampling-equipment decontamination water generated during this work.
   Costs for the storage and disposal of contaminated soil or wash water (discovered and generated during the field effort) are <u>not included</u> in our estimate. It is also anticipated that these materials will not designate as hazardous wastes.
- Sample analysis will be performed at a one-week schedule (non-rush basis). If expedited analyses are required, G-Logics should be notified. Expedited laboratory data will result in increased laboratory fees.

## **Project Costs**

The estimates of fees required to complete the exploration are presented below. The task budgets are shown to illustrate the relative complexity of each task. Although we have listed, discussed, and estimated each task separately, the tasks must be considered as part of an integrated study and cannot be performed individually.

Task Activity	Estimate
Workplan Preparation	\$500
Field Labor (two five-hour days, two personnel)	\$1,800
Field Equipment and Mileage	\$1,750
Utility Locate	\$350
Concrete Cores	\$500
Waste Drums	\$50
Drill Cuttings - Purge Water Disposal	\$0
Soil Sample Analyses (see cost detail below)	\$1,263
Soil-Vapor Sample Analyses (see cost detail below)	\$336
Report Preparation and Project Management	\$3,400
Estimated TOTAL (including the lab fees detailed below)	\$9,949



Collected soil samples will be submitted for the following analyses. **These costs are included in our project estimate above**. Other collected soil samples will be archived and analyzed only if additional site information is found to be necessary (as authorized by PHNW).

Soil Analyses		Quantity	\$/Sample	Cost
Hydrocarbon Identification	4	\$66	\$ 264	
Diesel / Heavy Oil Range Organics (NWTPH- Dx/EPA 8015/AK 102-103)		2	\$72	\$ 144
Gasoline and BTEX (NWTPH-GX & EPA 8021B)		1	\$72	\$ 72
PCBs		1	\$75	\$ 75
Volatile Organic Compounds (VOC) (EPA 8260)		3	\$168	\$ 504
MTCA-5 Metals (Pb, As, Cr, Cd, Hg)		2	\$102	\$ 204
Total Soil Analytical	(costs are included in summary table above)			\$1,263

Soil-Vapor Analyses		Quantity	\$/Sample	Cost
Volatile Organic Compounds (VOC) (EPA 8260)		2	\$168	\$ 336
Total Soil Analytical	(costs are included in summary table above)			\$ 336

All charges for our services will be on a time-and-materials basis, in accordance with our Environmental Services Fee Schedule. Our total fee for this project will not exceed our estimate without a change in the presented scope of services and only with PHNW's authorization. Invoices will be submitted on a monthly basis, payable within 30 days of the invoice date.

### **Project Schedule**

Fieldwork is anticipated to begin approximately one to two weeks following your authorization (drilling scheduled for May 16 and 17, 2013). We anticipate receipt of draft laboratory results approximately one week after sample submittal (non-rush basis), followed by a draft report within one week of analytical laboratory results. We will prepare a final report within approximately five days of receipt of your comments on the draft report.



Given this schedule, we anticipate providing a draft report by May 31, 2013 for the described scope of services. Additionally, we will keep you informed of conditions as they develop and will provide periodic verbal summary reports during our work.

#### **Additional Services**

Costs for items such as office meetings, written status reports, or additional work items not described above would be billed as incurred. These services would be performed only after PHNW approval.

#### Limitations

The proposed scope of services is intended to provide an assessment of possible contamination of soil on the property. However, this assessment is not designed to identify all potential concerns or to eliminate all risk associated with the subject property. Even the most rigorous of professional assessments may fail to identify all existing conditions. This assessment will not provide a guarantee regarding site contamination and may not generate sufficient data to accurately define the lateral and vertical extent of contamination, if present. This assessment will not include other services not specifically described in the scope of services presented above.

G-Logics will perform the assessment described in this workplan in accordance with the guidelines set forth in the ASTM Standard Practice for Phase II Environmental Site Assessments. Our assessment of the property may change as new data become available during additional exploration, remediation, or development. Additionally, property activities and regulations beyond our control could change at any time after the completion of our exploration. Therefore, our observations, findings, and opinions can be considered valid only as of the date of the exploration.

Unless otherwise identified, our report will be prepared for the sole use of our client. The scope of services performed during this exploration may not be appropriate for the needs of other users, and re-use of our findings, conclusions, or recommendations presented in our report is at the sole risk of said user(s). Any party other than our client who would like to use this report shall notify G-Logics of such intended use. Non-compliance with this requirement will release G-Logics from any liability resulting from the use of our report by any unauthorized party.



Washington law requires that we inform the state if a situation is encountered that can be considered an immediate endangerment to the environment or to the public's health or welfare. All information gathered during G-Logics' review is considered confidential and will be released only upon written authorization of the client or as required by law.

No warranty, express or implied, is made.

Authorization

The proposed scope of services, presented limitations, and our existing agreement with Pacific Housing NW LLC are the basis for the proposed fee. A signed copy of this workplan, a work order, or similar document, returned to us, will serve as a formal authorization to proceed. We will return an executed copy to you for your records. Your signed authorization will document your concurrence with the presented scope of services,

assumptions, schedule, estimated fees, and limitations of this assessment.

Closing

Sincerely, G-Logics, Inc.

Principal

We appreciate this opportunity to provide our services for this project. Please contact us if you have questions regarding the scope of services, the work schedule, or costs described in this workplan.

Rory L. Galloway, LG, LHG

Workplan accepted by (signature)

Date

Pacific Housing NW LLC

Attachment: Figure 2

g-logics