STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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December 6, 2016

Mr. Rory Galloway
G-Logics, Inc.
40 Second Avenue SE
Issaquah WA 98027

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

- **Name:** Gilman Square
- **Address:** 675 NW Gilman Boulevard, Issaquah WA 98027
- **Facility/Site No.:** 15541
- **Cleanup Site ID No.:** 12286
- **VCP No.:** NW2823

Dear Mr. Galloway:

Thank you for submitting documentation regarding your remedial cleanup strategy and ongoing assessment for the **Gilman Square** facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of the submitted reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release at the Site:

- Tetrachloroethylene (PCE), Gasoline-Range Total Petroleum Hydrocarbons (TPH-G), Oil-Range Total Petroleum Hydrocarbons (TPH-O), benzene, naphthalene, arsenic, chromium and lead into the Soil.

- TPH-G, BTEX, Vinyl chloride, arsenic, chromium, lead, chloromethane, and cis-1,2-dichloroethane into the Ground Water.

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The State does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program (TCP)has reviewed the following information regarding your proposed remedial action:

1. G-Logics, *Interim Cleanup Action Report, 675 NW Gilman Boulevard, Issaquah, Washington,* dated December 2, 2015.

2. G-Logics, *Cleanup Action and Contaminated Media Management Plan, 675 NW Gilman Boulevard, Issaquah, Washington,* dated May 2, 2014.

3. G-Logics, *Phase I Environmental Site Assessment Report, 675 NW Gilman Boulevard, Issaquah, Washington,* dated June 18, 2013.

4. G-Logics, *Phase II Environmental Site Assessment Report, 675 NW Gilman Boulevard, Issaquah, Washington,* dated October 25, 2013.

5. G-Logics, *Additional Site Exploration Report, 675 NW Gilman Boulevard, Issaquah, Washington,* dated January 6, 2014.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or via email at NWRO_public_request@ecy.wa.gov.

The Site is defined by the extent of contamination caused by the following releases:

- PCE, TPH-G, TPH-O, benzene, naphthalene, arsenic, chromium and lead into the Soil.
- TPH-G, TPH-O, BTEX, Vinyl chloride, arsenic, chromium, lead, chloromethane and cis-1,2-dichloroethane into the Ground Water.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases at the Site, Ecology has determined:**

- Your characterization of the Site determined that impacts to soil and ground water beneath the Site had occurred as a result of releases from a former dry cleaner located on the Property. PCE contamination was present in the soil at concentrations above MTCA

Method A cleanup levels and appeared to be confined to the footprint of the former dry cleaner building, to a depth of approximately five feet below the ground surface (bgs). Soil excavation and off-Site disposal was conducted. Vinyl chloride is present in the ground water at concentrations above the MTCA Method A cleanup level, within 60 feet (north and east) of the former dry cleaner footprint. No other volatile organic compounds are present in ground water. There was also the removal of five Underground Storage Tanks (USTs) associated with a former gas and service station. The contents of the five USTs included Gasoline-Range Total Petroleum Hydrocarbons (TPH-G), and Oil-Range Total Petroleum Hydrocarbons (TPH-O). Petroleum-contaminated soil was encountered, removed and disposed of off-Site. Confirmation soil samples were collected from the excavation bottom and sidewalls, and the results were below the MTCA Method A cleanup level. Ground water samples were collected and analyzed. All detected concentrations of TPH-G and BTEX were below the MTCA Method A cleanup level.

- Your assessment and planned remediation for 675 NW Gilman Boulevard in Issaquah, Washington (Property) was presented in the Site Cleanup Action and Contaminated Media Management Plan (CAP/CMMP), which was reviewed by Ecology and an opinion provided that was dated August 18, 2014. The CAP/CMMP presented the Site Feasibility Study and consideration/evaluation of remedial cleanup alternatives. The goal was to evaluate the potential alternatives against MTCA remedy selection criteria and select a preferred alternative.

- Ecology has determined your characterization of the Site is sufficient to establish cleanup standards for the Site and select a cleanup action for the Property. The cleanup action you proposed for the Property meets the substantive requirements of MTCA. Your proposed cleanup meets minimum cleanup requirements and will not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site.

  The selected cleanup action activity included:
  - Soil excavation and off-Site disposal were identified as the chosen cleanup strategy for petroleum- and PCE-contaminated soil, and this action was conducted. Confirmation samples were collected and analyzed.
  - Approximately 460 tons of suspected and confirmed chlorinated-solvent contaminated soil were removed from the area surrounding the former dry cleaner.
  - Removal of the five USTs and associated piping and fuel lines.
  - Approximately 558 tons of suspected and confirmed petroleum-contaminated soil was removed following the removal of the five USTs.
  - Installation of three new ground water monitoring wells (GL-MW-11, GL-MW-12, and GL-MW-13). The well locations were adjacent to and downgradient of the former dry cleaner facility.

  - Confirmation of the current status of the ground water, which is to be provided through scheduled quarterly groundwater monitoring and analysis for Vinyl Chloride.
  - Ground water monitoring and analysis.

Ongoing remedial activities:

  - Ongoing ground water sampling and compliance monitoring of the ground water monitoring wells in the dry cleaner area.
  - Injections for in-situ Enhanced Anaerobic Bioremediation (EAB) of ground water and performance evaluations.
  - Assessment of ground water sampling data to determine when to initiate consecutive quarterly monitoring of the ground water.

- A minimum of four consecutive quarters of groundwater monitoring data demonstrating contaminant of concern (COC) concentrations below MTCA Method A cleanup levels is required to evaluate the effectiveness of the selected action. The final four quarters of ground water monitoring data confirming the adequacy of the final cleanup has not yet been initiated. The monitoring data obtained from the three new monitoring wells (vinyl chloride is the remaining COC) will determine if the proposed cleanup action has resulted in soil and groundwater cleanup standards being met in a reasonable timeframe.

- PCE-contaminated soil (identified as having concentrations of PCE above the Method A cleanup level) was removed to the soil point of compliance, properly handled as F002 listed waste, and disposed of at a permitted facility. On May 14, 2014, Dean Yasuda of Ecology NWRO issued a formal contained-out determination concerning the management and disposal of excavated F002 contaminated soil for this project. An extension to the Ecology deadline for the management and appropriate disposal of excavated PCE contaminated soil was also provided in August 2014.

- Site maps and figures must be provided in the final Cleanup Action Report (CAR) to clearly depict the area and location of the excavations. The locations and results of confirmation soil sampling in the final limits of the excavation are to be presented on the figures in the CAR.

- Several ground water monitoring wells were abandoned. The well abandonment logs were included as an attachment to the Interim CAR. Criteria, specifications, locations and well logs for the three replacement monitoring wells must also be presented in the final CAR.

- As stated in Ecology's previous correspondence, a discussion of Site area geology and hydrogeology needs to be incorporated in the final CAR. Site maps, boring logs and geologic cross-sections are important in describing the Site conceptual model and clarifying the Site conditions. Summary tables should include all compounds that have

been detected in each media throughout the history of the Site and the proposed cleanup level for each compound.

- As stated in Ecology's previous correspondence, MTCA Method A cleanup levels for groundwater (Table 720-1) will need to be met at the standard point of compliance (throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected) are appropriate. Determination of conditional points of compliance is not appropriate.

- MTCA Method A soil cleanup levels for unrestricted land uses are appropriate (Table 740-1) with the standard point of compliance for soil throughout the Site to a depth of 15 feet bgs (WAC 173-340-740(6)(d)).

- As summarized in Ecology's previous correspondence, it has been determined that the Site qualifies for the Terrestrial Ecological Evaluation (TEE) exclusion. The TEE decision-making process for the Site was documented as required per WAC 173-340-7490. Cleanup levels protective of terrestrial ecological receptors are not necessary because the Site meets the initial TEE exclusion criteria (MTCA WAC 173-340-7491(1)(c)(i)). There are less than 1.5 acres of contiguous undeveloped land on or within 500 feet of any part of the Site.

- Under Washington State Law (reference Chapters 18.43 and 18.220 RCW), hydro geologic 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 hydrogeologist as evidence of this certification in the reports submitted to Ecology for this Site.

- As stated in Ecology's previous correspondence, 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 Manager to access data to check results or perform additional analyses with those data. Erika Fot (email efot461@ecy.wa.gov, or via telephone at 360-407-6692 is Ecology's contact and resource on entering data into EIM. Thank you for submitting all available sampling data into Ecology's electronic *Environmental Information Management* (EIM) database (confirmed by email by Erica Fot 7/7/2016).

This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the

proposed remedial action. To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. **This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore; if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The State, Ecology and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the State, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, contact me by phone at (425) 649-4422 or by email at gcar461@ecy.wa.gov.

Sincerely,

Glynis A. Carrosino, Project Manager
Toxics Cleanup Program

By Certified Mail: [9171 9690 0935 0132 2121 94]

cc: Brad Reisinger, Lennar Multifamily Investors
Stuart Hyde, G-Logics
Sonia Fernandez, NWRO VCP Coordinator Ecology