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October 8, 2021

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**SUBJECT: *RESPONSE TO COMMENTS TO A TECHNICAL MEMORANDUM OF REVIEW BY TRC,  
DATED JUNE 16, 2021***

Dear Mr. Jacky:

Below are GEI's response to comments (RTC) included in the Technical Memorandum of review that was prepared by TRC and dated June 16, 2021.

It should be noted that any and all proposal, reports, and other communications from GEI are intended solely for the use of GEI and you, unless otherwise approved by GEI. Reliance by other parties is at their own risk.

Respectfully submitted,  
GALLOWAY ENVIRONMENTAL, INC.

Dylan Galloway  
*President*

**GEI Comment to the Technical Memorandum**

Comment Number	Comment
1	<p>Statement: The Technical Memorandum states that the Cleanup Action Plan (CAP) does not address the totality of the site and that further characterization is needed to define the lateral extent of contamination.</p> <p><u>Comment 1:</u> As noted in the CAP, between 1992 and 2020, numerous environmental investigations were undertaken at the site. This includes at least 189 soil samples and 18 groundwater samples. Gleaning on these data, G-Logics mapped out the vertical and horizontal extents of contamination, as shown in their report figures, and included in the CAP.</p> <p><u>Comment 2:</u> It is GEI's understanding that the objective of the planned remedial actions are to remediate contamination within the property boundaries in pursuit of a Property-Specific No Further Action (NFA) determination.</p>
2	<p>Statement: The Technical Memorandum states that an Interim Action (IA) will not likely result in an NFA determination because it only addresses a portion of the site (i.e., contamination within the property boundaries).</p> <p>The Technical Memorandum also states that Ecology <u>requires</u> a full characterization of the lateral and vertical extent of impacts at a given site and that "all current and potential future exposure pathways have been evaluated and addressed by the proposed or completed remedial actions."</p> <p><u>Comment 1:</u> GEI agrees that a full characterization of a given site and an evaluation of current and future potential exposure pathways are optimum prior to initiating a remedial action. However, any party can undergo a remedial action at any point with the information they have on hand at the time of implementation. That being said, demonstration that all site (or property-specific) contamination has been addressed and potential current and future exposure pathways have been investigated and mitigated are necessary in order to obtain a NFA determination.</p> <p>As noted above in Comment Number 1, between 1992 and 2020, numerous environmental investigations were undertaken at the site. This includes at least 189 soil samples and 18 groundwater samples. Gleaning on these data, G-Logics mapped out the vertical and horizontal extents of contamination, as shown in their report figures, and included in the CAP.</p>
3	<p>Statement: The Technical Memorandum states that naphthalene and other potential contaminants of concern (COPCs) should be identified and included in the CAP.</p> <p><u>Comment 1:</u> Through the extensive environmental investigations that have occurred at the property by others, the primary constituents of concern (decision drivers) have been identified as total petroleum hydrocarbons as gasoline (TPH-Gas) and TPH-Gas constituents (i.e., benzene, toluene, ethylbenzene, and xylenes [BTEX]). However, GEI has no objection to including additional COPCs into the CAP.</p>
4	<p>Statement: The Technical Memorandum states that the Conceptual Site Model (CSM), included in the CAP does not address the vapor intrusion pathway.</p> <p>The Technical Memorandum also states that the CAP does not propose treatment in the areas beneath the existing structure.</p> <p><u>Comment 1:</u> GEI recommends re-reviewing the CSM as it does present a potentially complete exposure pathway to construction workers. A future vapor intrusion assessment (i.e., soil vapor and indoor air vapor sample collection and analyses) is</p>

4 (cont'd)	<p>planned to occur. However, it is not pertinent to preparation of a CAP for this site, though it may be for future site assessment work.</p> <p><u>Comment 2:</u> Due to the presence of subsurface utilities and the limited access of the structure, treatment inside the structure is not currently deemed feasible. Therefore, additional treatment solutions are planned immediately upgradient to the structure which are likely to migrate from the injection points, under the structure.</p>
5	<p>Statement: The Technical Memorandum states that the site as a whole should be further characterized to define the lateral and vertical extents of contamination in soil, groundwater, and vapor.</p> <p><u>Comment 1:</u> It is GEI's opinion that, as noted above, extensive soil and groundwater investigations have occurred at the property between 1992 and 2020. Also as noted above, the objective of the CAP and planned remediation is to address environmental contamination within the property boundaries.</p>
6	<p>Statement: The Technical Memorandum states that the CAP does not specify the direction of groundwater migration.</p> <p><u>Comment 1:</u> Prior to, and during the development of the CAP, GEI requested the land survey information for the groundwater wells. As of the date of this RTC, GEI still has not received these data. However, based on the steep dropping topography to the north/northeast, it is highly reasonable to conclude that predominant shallow groundwater flow direction is to the north/northeast.</p>
7	<p>Statement: The Technical Memorandum recommends performing a field scale pilot test.</p> <p><u>Comment 1:</u> GEI concurs that a field scale pilot test would be favorable to adjust the proposed scope of work.</p> <p><u>Comment 1:</u> Though TRC was unable to identify similar sites in which the proposed technology was successfully implemented, for over 26 years, GEI has successfully utilized the proposed technology for remediating petroleum contaminated soils and groundwater throughout western Washington. GEI simply does not publish the work in scientific journals, etc.</p>
8	<p>Statement: The Technical Memorandum states that the timeframe for attaining remedial action goals is "overly optimistic" and that it should incorporate long-term groundwater monitoring.</p> <p><u>Comment 1:</u> The proposed timeframe is an estimate and includes 3 to 6 months of active treatment with long-term groundwater monitoring for a total timeframe of approximately 2 years.</p> <p><u>Comment 1:</u> The timeframes for attaining remedial action goals using any technology are always estimates as many variables are present at each site. The timeframe included in the CAP may be adjusted based on the findings from a field scale pilot test, if one is conducted.</p>

Recommendations	<p>Statement: The Technical Memorandum recommends conducting additional site characterization to further define, or confirm, the lateral and vertical extent of contamination as well as conducting a field scale pilot test. The Technical Memorandum states that the information obtained during this preparatory work may be used to revise the CAP and Focused Feasibility Study (Focused FS).</p> <p><u>Comment 1</u>: GEI agrees that additional site characterization would be favorable to enhancing the proposed scope of work. GEI recommends that TRC provides a detailed scope of work for the additional site characterization.</p>
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