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August 6, 2021

Mr. Jeff Thomas City of Mercer Island 9611 SE 36<sup>th</sup> St Mercer Island, Washington 98040

Subject:Response to Comments and Questions on the Compliance Monitoring<br/>Plan/Environmental Media Management Plan, Mercer Island Property, 2885<br/>778th Avenue SE, Mercer Island, Washington dated June 18, 2021.

On behalf of Xinghua Group Ltd (Xinghua), CDM Smith Inc. (CDM Smith) has prepared this response to comments to the above referenced memo prepared by Aspect Consulting on behalf of the City of Mercer Island (the City), dated July 27, 2021. CDM Smith completed the referenced Compliance Monitoring Plan/Environmental Media Management Plan (CMP/EMMP), on behalf of Xinghua in preparation of redevelopment work that would remove soil and groundwater impacted by petroleum hydrocarbons and/or dry cleaning solvents by past property uses.

## **Response to Comments**

**Comment 1**, **Section 2.3.5**: This paragraph notes that MW3 is downgradient of the former drycleaning facility. However, according to Figure 2, MW3 is located southwest of the former facility, and Section 2.3.2 indicates that wells were installed to evaluate potential for contaminants migrating from the gas station to the south, implying a potential for northerly groundwater flow. Please provide additional information on the estimated groundwater flow direction and the basis of that estimate and explain how the existing data adequately bounds the extent of detectable contaminants.

**Response:** Section 2.3.2 references the Phase 1 and Phase 2 Environmental Site Assessments (ESAs) conducted in 2012. At that time, limited information was available on the hydraulic gradient for groundwater and the wells installed at the southern portion of the property were located to assess the potential for contaminant migration from the Shell station located across the street to the south, as well as to assess for potential groundwater impacts from the dry cleaning operation. Subsequent studies conducted by Farallon established the groundwater flow direction beneath the subject property. Sections 2.3.3 and 2.3.4 have been updated to provide the available information on the hydraulic gradient. Groundwater elevation contours for the site were developed using the depth-to-water measurements taken from the Site monitoring wells on September 17, 2013. The interpreted groundwater flow direction in the groundwater-bearing zone was east-southeast, with an estimated horizontal hydraulic gradient of approximately 0.0075 foot per foot. Farallon's *Summary of Subsurface Investigation Report, Mercer Island* 



*Apartments King Parcel Property,* dated November 12, 2014, also developed groundwater elevation contours using depth-to-water measurements obtained from the King Parcel monitoring wells on December 8, 2013. Groundwater contours indicated a groundwater flow direction in the shallow groundwater-bearing zone to the southwest at an estimated horizontal hydraulic gradient of approximately 0.009 foot per foot, consistent with the groundwater monitoring event conducted at the site in September 2013.

Based on the downgradient position of the groundwater monitoring wells MW1 through MW3 relative to the location of the dry cleaning facility, and the fact that no groundwater samples collected from site monitoring wells have ever contained PCE at a concentration exceeding the MTCA Method A cleanup level, we consider the available groundwater data adequately bounds the extent of impacted groundwater.

**Comment 2**, **Section 3.1**, **1st paragraph**: The maximum depth planned for exploration is 6 to 7 feet. Please explain the basis for this depth and why it is believed to be sufficient to characterize the extent of impacted soil. Information provided should include the depth of prior characterization samples and their results and the depth of excavation planned for redevelopment.

**Response:** Analytical data for cVOCs and total petroleum hydrocarbons in soil samples collected from borings advanced in the vicinity of the dry cleaner during are presented in Farallon's Summary of Subsurface Investigation Report, Mercer Island Apartments King Parcel Property, dated November 12, 2014. The CMP/EMMP references this data. The first paragraph of Section 3 has been updated to clarify that the purpose of the test pit investigation is to aid in refining the estimated volume of cVOC-impacted soil to be removed during the source removal excavation by defining the lateral extent of cVOC-impacted soils that will be managed under the CID. The vertical extent of contaminated soil containing PCE at concentrations exceeding the MTCA Method A cleanup level in the immediate vicinity of the former dry cleaning machine has been delineated by data obtained during previous investigations. Section 3.1 has been updated to include the rational for selecting the planned depth of the test pit investigation at 6-7 feet below ground surface (bgs). Based on the available data from borings advanced in the vicinity of the dry cleaner, cVOCs were not detected at concentrations exceeding their respective cleanup levels, with the exception of one soil sample, which exceeded the MTCA Method A cleanup level for PCE by 0.001 milligrams per kilogram at a depth of 2.5 feet bgs directly beneath the dry cleaner machine. Data obtained from previous investigations indicates concentrations of cVOCs generally decrease with depth. Excavation of cVOC impacted soil to be managed under the CID within the lateral boundary defined by the test pit investigation, will proceed from the ground surface to the



design depth of 12 feet bgs and performance soil samples will be collected from the bottom of the completed excavation per the sampling plan discussed in Section 5.

**Comment 3**, **Section 5.1**: Please clarify if field screening will be conducted over the entire development footprint, or just within the area of identified impacts.

**Response:** RECs identified during previous Phase 1 ESAs included the historical dry cleaning operation and a possible heating oil underground storage tank (UST) associated with a historical oil burner on the site. Prior investigations evaluated RECs to the extent practicable. Field screening will occur in areas of known impacts. If, during excavation outside these areas, evidence of contamination is found (e.g. discolored or odorous soils, or a heating oil UST), then the nature and extent of that contamination will be evaluated and handled appropriately per the contingency plan discussed in the following comment. Section 5.1 has been modified to clarify that field screening will be conducted throughout areas of known soil impacts. Section 5.5 has been added to address contingency planning field screening in the event that newly impacted areas are discovered during excavation per Comment 4.

**Comment 4**, **Section 5.1**: Please include a contingency plan that covers unanticipated discoveries, including previously unidentified contamination or concentrations of contaminants greater than identified in prior studies. The plan should include:

- Field observations that would indicate a potential for previously unidentified impacts.
- Procedures for assessing potential impacts if discovered (e.g., stopping work in the affected area and conducting additional sampling).
- Notifications/reporting procedures, including but not limited to release reporting to the Washington State Department of Ecology (Ecology) if warranted in accordance with Toxics Cleanup Program Policy 300 dated June 10, 2004.
- Plan for handling and disposing of soil if concentrations do not allow classification per the soil categories identified in Section 8.
- Plan for addressing contamination if discovered to extend laterally or vertically beyond the redevelopment limits.

**Response:** Section 5.5 has been added to the CMP to describe contingency planning to address unanticipated environmental conditions that may be encountered during construction. Unanticipated environmental conditions include, but are not limited to, the discovery of a UST or field observations of staining, odors or elevated PID readings that may indicate previously unidentified impacts. Further clarification has been provided to state that the excavation is planned to proceed to the design depth and lateral extent specified by the construction



contractor. In the unlikely event that performance sampling data obtained during the removal of CID soils or problem waste soils as described in Section 5.2.2 and Section 8 indicate that contamination in excess of the applicable cleanup levels remains at the design limits of the excavation, it will be evaluated by the project team. If it is practical to excavate and remove all soils exceeding the applicable cleanup levels, then soil over-excavation will be performed and additional performance samples will be collected from the completed limits of the over-excavated areas to demonstrate the final conditions and completion of the cleanup action.

**Comment 5**, **Section 5.3**: Please provide additional information regarding potential dewatering of groundwater and associated monitoring, including:

- Depth of excavation relative to water table.
- Anticipated duration and flowrate of construction dewatering.
- Where will water be discharged to, and under what regulatory authority/permit.
- What treatment will be provided for the discharged water.
- If the development extends beneath the water table, how will groundwater be collected and where it will be discharged after construction, and what monitoring will be conducted to ensure water quality does not change over time.

**Response:** Construction dewatering implementation and design is the responsibility of the construction contractor. Hart Crowser has performed a geotechnical investigation on behalf of the construction contractor and the contractor is currently planning the design for dewatering. The CMP specifies that recovered groundwater will be sampled for waste disposal characterization and discharge permit compliance. Analytical methods will be based upon discharge permit requirements and treatment of recovered groundwater prior to discharge, if any, will be designed to ensure compliance with the discharge permit. CDM Smith will assist with sampling and characterization of recovered groundwater as needed. It is beyond the scope of this CMP/EMMP to specify the anticipated duration and flowrate of dewatering, point of discharge regulatory authority/permitting, treatment of recovered groundwater and long term dewatering plans for the re-development. Given that groundwater samples collected from the site have never contained concentrations of cVOCs at concentrations exceeding the MTCA Method A cleanup levels, it is unlikely that recovered groundwater will contain detectable concentrations of cVOCs.

**Comment 6**, **Section 8.2**, **1st paragraph**: Please provide additional guidelines (e.g., referencing Ecology's Guidance for Remediation of Petroleum Contaminated Sites) and/or identify target disposal facilities for the disposal of problem waste.



**Response:** Section 8.2 has been modified to reference Table 12.2 Description and Recommended Best Management Practices for Soil Categories in Table 12.1 and the Table 12.2 has been added to Appendix A. Identification of the actual facilities for disposal of problem waste is the responsibility of the construction contractor and beyond the scope of this CMP/EMMP. Appropriate disposal of excavated soils will be based on the results of characterization sampling in accordance with the Ecology guidance document and approval of the waste disposal facility.

**Comment 7**, **General**: Please add a section on reporting, which should include documentation of groundwater and soil disposal at appropriate facilities as required by appropriate regulatory authorities.

**Response:** Section 9 has been added to state that CDM Smith will prepare a closure report at the completion of the soil removal action. The report will include documentation for disposal of soil and groundwater in appendices.

**Comment 8**, **Appendix A**: Please also include in this appendix Table 12.2 from Ecology's Guidance for Remediation of Petroleum Contaminated Sites, as it provides important details regarding allowable disposal and reuse of different categories of soil.

**Response:** Table 12.2 Description and Recommended Best Management Practices for Soil Categories in Table 12.1 has been added to Appendix A.

CDM Smith, on behalf of Xinghua, appreciates the opportunity to respond to the comments on the CMP/EMMP and seeks concurrence from the City of Mercer Island on our Revised Final Compliance Monitoring Plan/Environmental Media Management Plan, Mercer Island Property, 2885 778th Avenue SE, Mercer Island, Washington. A copy of the Revised Final CMP/EMMP, dated August 6, 2021, which incorporates the changes outlined in this response to comments letter is provided to accompany this letter. Please feel free to call me at 425-519-8300 with any questions or concerns.

Very truly yours,

August Welle

August Welch, LG, PMP Project Manager CDM Smith Inc.



cc: Guohai Lu, Xinghua Group Ryan Healy, R. Miller, Inc. Lu Zhang and Megan McKay, Johnston Architects Jay Lukan and Lisa Lukan, LCI Consultants Jeremy Porter, Aspect Consulting