



MEMORANDUM

Date: 28 January 2021 **Job No.:** 19307-00.02754

To: Piu Ghosh, Planning Manager, Community Development, City of Cupertino

From: Cem Atabek and Bruce Abelli-Amen, PG, CHg

Subject: **Peer Review of Excavation Management Plan, Former Vallco Mall, Cupertino, California**

Baseline Environmental Consulting (Baseline) has performed a peer review of the Excavation Management Plan (EMP) prepared by WSP USA, Inc. (WSP) on behalf of Vallco Property Owner, LLC (Applicant) for the Former Vallco Mall located at 10123 North Wolfe Road in Cupertino, California (Site), dated December 2020, Revised January 2021. Comments from Baseline's peer review are presented below. Recommendations for actions are provided in **bold text**. Baseline's review did not include the review of health and safety plans included in the EMP, as the health and safety of workers is the responsibility of their employers.

COMMENTS

- Section 2, page 4 of the EMP includes a list of background documents that are indicated to be included in Exhibit D of the accompanying DEVCON Construction Management Plan (DCMP); however, Exhibit D of the DCMP includes only asbestos and lead testing results and does not include any of the background documents listed in Section 2 of the EMP. The listed background documents include the Environmental Site Management Plan (ESMP) and several documents that are listed as appendices of the ESMP, but they are actually appendices of the Site Characterization Report (SCR). Including the ESMP, SCR, and associated appendices within the EMP would make the EMP an unnecessarily large document since these background documents can simply be referred to. **The background documents should either be attached or the reference to the attachments corrected.**
- Given that demolition of Site features and staging of demolition debris has occurred in the areas to be excavated, locating the previous borings could be difficult. It is not clear whether the previous boring locations were surveyed or flagged. **Section 2.2 Excavation of the EMP should be revised to indicate how the previous borings and excavation areas will be accurately located.**
- Section 2.2 *Excavation* of the EMP indicates that the sequencing of the excavation will be determined by the Contractor in consultation with WSP to maximize efficiency and

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logistics of stockpile management. The precise extent of soil impacted with PCBs exceeding 1 milligram per kilogram (mg/kg) is not known, and confirmation sampling is proposed to confirm that soil with PCBs exceeding 1 mg/kg is adequately removed. Based on this approach, **the EMP should be revised to indicate that excavation and confirmation sampling of areas with known PCBs exceeding 1 mg/kg and the area of boring E5P-N which could potentially contain PCBs exceeding 1 mg/kg will occur prior to excavation of surrounding areas.**

- **Section 2.2 *Excavation* of the EMP should be revised to indicate that if stained, oily, or odorous soil is encountered during pavement removal or excavation activities, which could indicate significantly higher concentration of PCBs than have been detected in samples collected to date, then in-situ sampling, segregation, and management of the impacted soil would be performed in accordance with the guidelines of the ESMP.**
- The first sentence of Section 2.3 *Stockpile Management* of the EMP indicates that stockpiling of excavated soil will generally be eliminated with direct loading of soil onto trucks; however, this section also discusses how areas with PCBs exceeding 1 mg/kg will be placed in segregated stockpiles. The second sentence of this section starts with, “if necessary” with regard to stockpiling. Because the EMP indicates that stockpiling will be performed, **these discrepancies should be corrected.**
- Section 2.4 *Transportation and Disposal* of the EMP indicates that trucks will be wet/dry decontaminated, if necessary. **The EMP should be revised to describe how waste soil/water generated during decontamination activities will be contained, managed, and disposed of.**
- In the first paragraph of Page 2 of the Investigation and Management of PCB Contaminated Soil (PCBs Report) presented in Appendix A of the EMP, two samples were erroneously identified as ESP-N-3 and ESP-W-3, rather than E5P-N-3 and E5P-W-3. **This error should be corrected.**
- The PCBs Report describes a segregated excavation around boring E5P-N because elevated laboratory reporting limits for a sample from 3 feet deep in this boring has created uncertainty with regard to the concentration of PCBs that could be present in the area of this boring. The PCBs report indicates that this segregated excavation would extend to a depth of 3 feet. Given that elevated reporting limits due to interference from hydrocarbon-rich matrix was noted in the sample collected from 3 feet deep in boring E5P-N, **this segregated excavation should extend to at least 4 feet deep to ensure that the petroleum hydrocarbon (and potential elevated PCBs) impacted soil at 3 feet deep is removed.**

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- Considering the proximity of boring E5P-N to the area of proposed segregated excavation for known PCBs exceeding 1 mg/kg, and because PCBs were detected at just under 1 mg/kg (0.94 mg/kg) in the sample from 1 foot deep in boring E5P-N, it is likely that soil with PCBs exceeding 1 mg/kg could be present in the area between the segregated excavation and boring E5P-N. Therefore, we would recommend extending the proposed segregated excavation for known PCBs exceeding 1 mg/kg to include the area of boring E5P-N. **The limits of the proposed segregated excavation surrounding boring E5P-N and proposed confirmation sample locations for this excavation should be shown on Figures 2 and 3 of the PCBs Report. Sidewall confirmation samples should be collected from the excavation surrounding boring E5P-N, consistent with the approach for other excavation areas, to ensure that soil potentially containing PCBs exceeding 1 mg/kg has been adequately removed.**
- The PCBs Report indicates that if the PCBs concentration in the confirmation soil sample from the segregated excavation around boring E5P-N is greater than 1 mg/kg, the segregated soil will be disposed of with the other TSCA-landfill soil. Excavation confirmation sampling is not an appropriate method for characterizing soil that has already been excavated, however, because it characterizes the soil that remains in place and higher concentrations of PCBs could be present in the soil that was removed. **The PCBs report should be revised to indicate that soil segregated from the excavation around boring E5P-N will be disposed of with the other TSCA-landfill soil or placed in a segregated stockpile which will be tested for PCBs for waste characterization.**
- The PCBs Report indicates on Page 4 that step-out samples will serve as confirmation samples for the excavation of PCBs impacted soil above 0.23 mg/kg. The Memorandum prepared by EKI Environment & Water, Inc. (EKI) and WSP dated 17 December 2020 indicates that confirmation soil samples will not rely on the step-out sampling results. **The PCBs Report should be revised to address this discrepancy.**
- **The Sampling and Analysis Plan (SAP) presented as Appendix E of the EMP should be revised to be consistent with the revisions to the PCBs Report that are recommended in this memorandum.**
- The PCBs Report indicates on Page 4 that Steve Armann, EPA Region 9's PCB Program Coordinator, indicated that disposal of PCBs under 40 CFR 761.61(b) would be appropriate. Baseline has reviewed the email correspondence between Michelle King of EKI and Steve Armann of EPA dated 25 March 2020. The email correspondence refers to two small PCBs releases, but no specific information was provided to Mr. Armann regarding the extent of PCBs impacted soil to be removed. Mr. Armann indicated that 761.61(b) might make the most sense if there are "low volumes" of PCB waste;

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however, it is not clear what he considers to be low volumes. Mr. Armann may have been thinking that this is an issue of a few cubic yards of surface soil rather than two areas with proposed excavation volumes of 80 cubic yards and 69 cubic yards, including excavation at significant depth (12 to 20 feet) in the former Sears Automotive Center area. While Mr. Armann indicated that no notification is necessary for 761.61(b), the Q&A information that Mr. Armann provided for 761.61(b) indicates "PCB remediation waste may be regulated for disposal at PCB concentrations <50 ppm. Section 761.61(b) only addresses disposal of waste. Section 761.61(b) does not require removal of PCB remediation waste at any specified concentration nor does this paragraph provide for the procedures to demonstrate cleanup at a site is complete. To be completely unregulated for disposal off-site without an approval from EPA, waste must contain <1 ppm, and that concentration must not be the result of dilution during remediation (i.e., by mixing with clean soil during excavation)." Because soil with detected PCBs concentrations up to 1.9 parts per million (ppm, which is equivalent to mg/kg) will be excavated and disposed of, and procedures are required to demonstrate that cleanup the Site is complete, it appears that notification and approval from EPA to perform self-implementing cleanup under 40 CFR 761.61(a) may be necessary, which includes procedures to demonstrate that Site cleanup is complete. **After addressing the comments in this memorandum, the revised PCBs Report should be submitted to EPA for an informal review and feedback on whether following 761.61(a) and EPA notification/approval is required (assuming EPA is willing to perform an informal review). Written documentation (e.g., email correspondence) should be provided to the City to demonstrate that the Applicant has submitted the PCBs report to EPA and to document EPA's response. If EPA indicates that self-implementing cleanup in accordance with 40 CFR 761.61(a) is required, then the EMP should be revised accordingly, and prior to the City issuing a grading permit for the proposed cleanup activities the Applicant should provide the City with EPA notification and certification documentation and written approval from EPA to perform self-implementing cleanup in accordance with 40 CFR 761.61(a).**

- The PCBs Report indicates on Page 5 that remediation of the former Sears Automotive Center will be performed with oversight/review from Santa Clara County Fire Department (SCCFD) under the approved Closure Plan. Based on previous discussions with the Applicant, City, and Santa Clara County Environmental Health Department (SCCEHD), we understand that SCCFD referred the closure of the former Sears Automotive Center to SCCEHD, and that remediation of the former Sears Automotive Center would be performed in accordance with the EMP and PCBs Report, not the Closure Plan, and that SCCEHD may not have an active oversight role in the cleanup activities. **The PCBs Report should be revised to address the discrepancies regarding the Closure Plan and oversight roles.**

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- The PCBs Report indicates that the highest concentration of TPH-d (1,200 mg/kg) was detected in sample OWPI-W5-20 collected from a depth of 20 feet near the west side of the former oil water separator. It is not clear whether this sample location with elevated TPH-d is within the proposed excavation below the former oil water separator. **The PCBs Report should be revised to demonstrate that the location of sample OWPI-W5-20 is within the proposed excavation below the former oil water separator, and this excavation should extend deeper than 20 feet on the west end of the excavation.**
- During a call with the Applicant and SCCEHD on 2 November 2020, the SCCDEH indicated that they most likely would not open a cleanup case or provide direct oversight for proposed remediation activities at the former Sears Automotive Center; however, SCCDEH indicated that soil vapor sampling should be performed at the Sears Automotive Center to evaluate potential impacts from volatile organic compounds (VOCs) prior to implementing proposed remedial excavation activities, and that SCCDEH should review the soil vapor sampling results to confirm that they would not open a cleanup case or provide direct oversight. **Prior to the City issuing a grading permit for the proposed cleanup activities, the Applicant should submit the report documenting soil vapor sampling results to SCCEHD, and the Applicant should provide the City with written approval from the SCCEHD to implement the proposed cleanup activities at the former Sears Automotive Center either with or without direct oversight from the SCCEHD.**
- Section 1.2 *Chemical of Concern* of the Dust and Vapor Control Plan (DVCP) indicates that PCBs and total petroleum hydrocarbons as diesel (TPH-d) have been detected in soil samples and are considered constituents of concern (COCs) at the Site. **The DVCP should be revised to indicate the VOCs and semi-volatile organic compounds (SVOCs) were also detected in soil samples at the former Sears Automotive Center because the excavation of soil impacted by VOCs and SVOCs can result in emissions of vapors. The results of soil vapor sampling performed at the former Sears Automotive Center should also be discussed in the DVCP since the soil vapor sampling results provide relevant information regarding concentrations of contaminant vapors that may be emitted during excavation activities.**
- Section 4.1 *Monitoring for Organic Vapors* of the DVCP indicates that work will be temporarily halted if photoionization detector (PID) readings exceed 5 ppm above background levels. **The DVCP should be revised to indicate how the 5 ppm threshold was established and why it is an appropriate threshold based on the contaminants present at the Site. The DVCP should indicate whether the vapor monitoring thresholds established for worker protection will also be protective of the surrounding public.**

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- Baseline performed a brief review the Storm Water Pollution Prevention Plan (SWPPP) included as Appendix D of the EMP for issues that pertain to the proposed remediation activities addressed by the EMP (findings and recommendations are included in the following bullet points). The SWPPP covers the entire Site redevelopment project, and Baseline’s review of the SWPPP was not intended to ensure that the SWPPP for the entire Site redevelopment complies with all applicable requirements of the State Water Board’s Construction General Permit. **The City should ensure that a detailed review of the SWPPP for general compliance with permitting requirements is conducted by City staff.**
- Section 7.1.1 *Sampling and Analysis Plan for Non-Visible Pollutants in Stormwater Runoff Discharges Storage* of the SWPPP indicates that storage, use, and operational locations for non-visible pollutants are shown on the Site Maps in Appendix B, and indicates that there are no existing site features locations contaminated with non-visible pollutants. The Site Maps in Appendix B of the SWPPP do not appear to show storage, use, and operational locations for non-visible pollutants. **Section 7.1.1 of the SWPPP should be revised to include soil contaminated with PCBs, TPH (diesel and motor oil), and VOCs as potential sources of non-visible pollutants to stormwater discharges from the project, and to indicate that there are two Site locations contaminated with non-visible pollutants, the known contaminated soil to be excavated in the Wolf Road Area and former Sears Automotive Center. Maps identifying storage, use, and operational locations for non-visible pollutants and the areas of known contaminated soil to be excavated should be included in Appendix B of the SWPPP.**
- PCBs and VOCs are already included in the SWPPP Table 7.11 *Sample Collection, Preservation and Analysis for Non-Visible Pollutants*. **TPH (diesel and motor oil) should be added to Table 7.11 of the SWPPP.**
- Section 4.1 *Sampling Procedures* of the SAP indicates that proposed confirmation sample locations for the former Sears Automotive Center excavations are shown on Figure 8 of the PCBs Report, however confirmation sample locations are not shown on Figure 8 of the PCBs Report. **The SAP or PCBs Report should be revised to address this discrepancy.**
- Section 4.1 *Sampling Procedures* of the SAP indicates that confirmation samples collected from the excavation around the hydraulic lifts (HL-4 and HL-6) will also be analyzed for TPH-d by EPA Method 8015, however the highest concentration of TPH-d was detected in sample OWPI-W5-20 collected from a depth of 20 feet near the west side of the former oil water separator. **The SAP should be revised to indicate that**

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excavation confirmation samples collected from below the oil water separator (at least on the bottom/west side) should be analyzed for TPH-d.

- Section 4.1 *Sampling Procedures* of the SAP indicates that select confirmation samples collected in the former Sears Area will additionally be analyzed for VOCs by method 8260B to address some detections of VOCs discovered during sampling as part of the closure plan for the Sears Automotive Center. **The SAP should be revised to clarify the locations of confirmation samples that would be analyzed for VOCs. The SAP should also be revised to indicate that excavation sidewall confirmation sampling depths may be adjusted based on field observations of physical signs of potential impacts (e.g., staining, odors, or PID readings) and that confirmation samples would be collected from the depths where physical signs of potential impacts (if observed) were most pronounced.**
- Section 4.1 *Sampling Procedures* of the SAP indicates that “sidewall confirmation samples will be collected at the depth that corresponds to where PCB concentrations were noted above 1 mg/kg (i.e., 1 foot bgs in the Wolfe Road Area and up to 20 feet bgs in the former Sears Area).” Concentrations of PCBs above 1 mg/kg were only detected in samples collected from a depth of 14 feet below the former oil water separator at the former Sears Automotive Center. **This SAP should be revised to address this discrepancy and indicate the depths from which sidewall confirmation samples will be collected in all of the proposed excavations at the former Sears Automotive Center.**
- The DCMP included as Appendix F of the EMP indicates that it applies to demolition of Zone A2 at the Site, and based on the maps included in the DCMP, Zone A2 at the Site does not include the Wolf Road Area or Former Sears Automotive Center which are the subject of the EMP. Section 5.1 on page 5 of the DCMP indicates “The Vallco Shopping Center Zone A2 Demolition project scope does not involve excavation, ground disturbing activities, dealing with hazardous material storage, etc. as outlined in MM HAZ-1.1. Therefore, an SMP is not applicable to this project scope. An SMP for the greater Vallco Shopping Center project will be submitted/coordinated with SCCDEH prior to permit submittal.” **The EMP should be revised to address the discrepancy regarding the DCMP not covering the proposed remediation activities.**
- **Following the completion of proposed cleanup activities, the Applicant should provide the City and SCCDEH with a Completion Report documenting the cleanup activities, contaminated soil disposal, and confirmation sampling analytical results. Prior to the City issuing a grading or excavation permit for ground disturbing construction activities in areas immediately surrounding the proposed cleanup activities, the City, as advised by a qualified third-party consultant, and SCCDEH should review and**

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provide written approval of the Completion Report. The Completion Report should be prepared in accordance with the record keeping requirements of 40 CFR 761.61(a).