October 14, 2022

Mr. Marcus Gilmore
Lane Partners
644 Menlo Avenue, 2nd Floor
Menlo Park, California 94025

Subject: **Pre-Construction Site Investigation Report Conclusions and Responses to City of San Mateo Questions**
222 East 4th Avenue, San Mateo, California (the "Subject Site")

Dear Mr. Gilmore:

As requested, RMD Environmental Solutions, Inc. (RMD) has prepared this letter to address questions regarding The City of San Mateo's (the City's) hazardous materials analysis in consideration of our *Pre-Construction Site Investigation Report* dated July 7, 2021 (Report), associated with the Subject Site.

Questions provided by the City *via* e-mail dated October 13, 2022, are listed below in *blue italicized text*. RMD's response follows each point in black font.

1. *The site is on the Cortese list as "completed, case closed". Does the Phase II indicate site conditions continue to warrant inclusion on the Cortese list, or can the listing be considered 'historic'?* The Cortese database includes sites with underground storage tanks (USTs) having a reportable release. The Phase I Environmental Site Assessment (Phase I ESA) prepared for the Subject Site (Geosyntec, May 2, 2019) documented that USTs and hydraulic lifts associated with two former gasoline service stations at the Site were removed during the 1980s and 1990s. The regulatory closure letter issued by San Mateo County Environmental Health Services (SMCEHS, March 12, 1997) shows that the Subject Site investigation into impacted soils from historical operations at the Subject Site was considered complete and that no further investigation and/or remediation was required. Accordingly, under the applicable Phase I ESA standard (ASTM E1527-13), Geosyntec concluded that these past operations represent a *historical* recognized environmental condition (HREC) – as opposed to a current or ongoing recognized environmental condition (REC) under ASTM E1527-13. RMD's 2021 investigation

indicated no new or additional information that would indicate further governmental oversight was necessary. Accordingly, the listing should be considered historical, because there are no continuing or ongoing concerns in regard to the issues that gave rise to the initial Cortese listing, and because written regulatory closure was issued in regard to the environmental condition of the Subject Site.

2. *Do site soil and groundwater conditions pose a risk to human health and the environment, including construction workers and nearby residences, from proposed construction activity that would excavate to a depth of 25 below grade and off-haul 25,828 CY of soil?*

   Based on RMD's 2021 subsurface investigation data, soil and groundwater do not pose a significant risk to human health and the environment in relation to proposed construction activities, including with respect to construction workers and in regard to nearby residential use. In RMD's July 2021 report, soil and groundwater data collected were compared to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 Environmental Screening Levels (ESLs). Tier 1 ESLs are the most conservative screening levels considering all exposure pathways and exposure point scenarios, which include construction workers and residential receptors. Evaluation of soil and groundwater data against screening levels is summarized as follows:

   Soil: As documented in the Report, Total Petroleum Hydrocarbons in the gasoline range (TPHg) and in the diesel range (TPHd), along with volatile organic compounds (VOCs) and metals were reported at concentrations in soil at levels that were all below Tier 1 ESLs or naturally-occurring regional background levels[1]. Furthermore, none of the reported concentrations exceeded threshold concentrations that would indicate the soil would be classified as a hazardous waste, including for purposes of off-site disposal.

   In conclusion, soil conditions at the Subject Site do not pose a significant risk to human health or to the environment. That being said, a Construction Site Management Plan (SMP) will be prepared for the Subject Site that will include contingency measures and protocol in the event that a localized area of contamination or subsurface feature is unearthed during excavation activities. Further details are described below in Item 3.

[1] Arsenic and vanadium were reported above Tier 1 ESLs however were less than the concentration of naturally occurring levels in bay area soil. Because soil throughout the State of California has naturally-occurring metals levels above these ESLs, governmental agencies in California use the naturally-occurring regional background levels – as opposed to the ESLs – as the applicable standard for these metals.

Groundwater: As documented in the Report, total petroleum hydrocarbons as diesel (TPHd) and chloroform were the only two constituents with concentrations reported above Tier 1 ESLs.

- Chloroform: The maximum concentration of chloroform reported is 3.67 µg/L compared to the Tier 1 ESL of 0.81 µg/L. The Tier 1 ESL is based on a groundwater concentration that is protective of the vapor intrusion into indoor air exposure pathway. This exposure pathway is not a complete exposure pathway for the construction workers that will be performing work outdoors or nearby residents that are located off-site. Although there is a potential for VOCs (which includes chloroform) to volatilize into outdoor air during construction activities, inhalation of VOCs in outdoor air is considered negligible for on-site and off-site receptors due to complete and virtually immediate dispersion in ambient air.

  The low-level chloroform concentration is likely attributed to potable water (as a result of chlorination of organic matter present in raw water supplies). The maximum concentration of chloroform reported in groundwater is well below the maximum contaminant level (MCL) of 80 µg/L. Considering that groundwater will not be used for potable water purposes, the maximum concentration of chloroform is well below the ESLs based on gross contamination and odor nuisance levels for non-drinking water of 50,000 µg/L and 24,000 µg/L, respectively. Table 1 provides values of ESLs for chloroform for non-drinking water exposure.

- TPHd: The maximum concentration of TPHd reported is 353 µg/L compared to the Tier 1 ESL of 100 µg/L. The Tier 1 ESL is based on odor nuisance levels for drinking water, and this standard is not relevant for project construction or operation because the groundwater will not be used for potable water purposes. Table 1 provides values of ESLs for TPHd for non-drinking water exposure. As shown, the lowest ESL is 2,500 µg/L which is based on SFBRWQCB's gross contamination non-drinking water screening level for TPHd. The reported value of 353 µg/L beneath the Site is an order of magnitude below the ESL and not considered a significant risk.

In conclusion, groundwater conditions do not represent a concern or pose any significant risk to human health or the environment.

3. *Is regulatory oversight of construction activity required and what measures, if any, are needed during construction to protect workers and nearby residents from exposure to any site contamination likely to be released during construction?*

   As confirmed by Mr. Jacob Madden of San Mateo County Groundwater Protection Program, the Subject Site is not a significant concern with regard to residual contamination. However, the County may require a Construction Soil Management Plan (SMP), as yet to be discussed and determined during the County's review of the project. The SMP would be used as a guidance document for handling impacted soil and groundwater, if encountered, during construction activities. Under the SMP, notification to San Mateo County will be required in the event that an unanticipated condition is encountered during site grading (*e.g.*, a localized area of contamination or an underground structure).

   The SMP would identify required soil and groundwater management measures typical of construction projects throughout this County and the State of California. These would include standard dust control measures (*e.g.*, keeping soil moist during excavation and loading) and compliance with the City of San Mateo's municipal stormwater permit and related discharge permits during dewatering activities. The need for groundwater treatment prior to discharge will be determined during the required Application for Groundwater Waste Discharge Permit through the City of San Mateo Public Works Department.

   The requirements that will be specified in the SMP are standard practice for the construction industry. No augmented mitigation measures beyond standard construction standards and permit requirements are needed based on known conditions to in order protect construction workers or the residents during project construction.

No further site characterization or testing is recommended by RMD prior to construction for planning purposes. If you have any questions or comments, please do not hesitate to contact Ms. Kirsten Duey at (925) 683-8177 or kduey@rmdes.net.

Sincerely,
RMD ENVIRONMENTAL SOLUTIONS, INC.

Kirsten Duey
Principal Engineer

Table 1
Summary of Grab Groundwater Analytical Results - TPH and Detected VOCs
222 East 4th Avenue
San Mateo, California

Boring ID	Boring ID *(feet bgs)*	Date Sampled	TPHg *(µg/L)*	TPHd [Note 2] *(µg/L)*	TPHmo [Note 3] *(µg/L)*	Benzene *(µg/L)*	Chloroform *(µg/L)*
Residential Groundwater SL - Vapor Intrusion [1]			--	--	--	*0.42*	*0.81*
Groundwater SL - Odor Nuisance NDW [1]			*5,000*	*5,000*	--	*20,000*	*24,000*
Gross Contamination SL [1]			*50,000*	*2,500*	--	*50,000*	*50,000*
SB-02	22 - 32	3/18/2021	ND<100	ND<100	245.2 J	0.111 J J3 J6	3.67 J3 J6
SB-11	33 - 43	3/18/2021	ND<100	353	367	ND<0.500	0.571

Notes:
NDW = Non-drinking water.
[1] Values represent the California Regional Water Quality Control Board-San Francisco Bay Region Environmental Screening Levels (ESLs; SFBRWQCB, 2019).
[Note 2] TPHd data shown represents laboratory results for carbon range C12-C22 hydrocarbons.
[Note 3] TPHmo data shown represents laboratory results for carbon range C22-C40 hydrocarbons.
SFBRWQCB ESL = San Francisco Bay Regional Water Quality Control Board
VOCs = Volatile Organic Compounds.
TPHg = Total Petroleum Hydrocarbons as gasoline.
TPHd = Total Petroleum Hydrocarbons as diesel.
TPHmo = Total Petroleum Hydrocarbons as motor oil.
µg/L = Micrograms per liter.
ND<0.500 = Not detected above noted laboratory reporting limit.
"--" = No Value Established.
J = Estimated value.
J3 = The associated batch QC was outside the established quality control range for precision.
J6 = The sample matrix interfered with the ability to make any accurate determination; spike value is low.