Appendix F:
Summary of Soil and Groundwater Sampling Activities

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May 24, 2021
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Outfront Media
1695 Eastshore Highway
Berkeley, California 94710

Attn: Mr. Jeff McCuen
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Re: Summary of Soil and Groundwater Sampling Activities
Langton Way Billboard
17338 Langton Way
Hayward, Alameda County, California
Terracon Project No. ND215017

Dear Mr. McCuen,

Terracon Consultants, Inc. (Terracon) is pleased to submit this Summary of Soil and Groundwater Sampling Activities performed for the proposed billboard to be located at 17338 Langton Way in Hayward, Alameda County, California. The sampling was completed in accordance with our proposal and agreement for services dated March 4, 2021 (Terracon Proposal No. PND215017).

Site Information

The site is located at 17338 Langton Way in Hayward, Alameda County, California and consists of an approximately 0.23-acre tract of land designated as Assessor Parcel Number (APN) 414-6-45-2. The project site is located in residential lot in a paved parking lot in the backyard. The project consists of constructing a single 80-foot-tall metal frame billboard, supported by an approximate 5-foot diameter pier completed to a recommended depth of up to 67-feet below ground surface.

Scope of Work

Terracon was engaged by the client to collect one soil and one groundwater sample concurrent with the geotechnical borings to evaluate the presence or absence of regulated environmental chemicals that may be encountered during foundation construction of the proposed billboard. Terracon's understands a nearby leaking underground storage tank (LUST) case, ABE Petroleum, is located at 17715 Mission Boulevard may have had the potential to impact soils and groundwater in the vicinity of the Langton Way Billboard.

Terracon mobilized to the site on April 12, 2021 to collect one soil and one groundwater sample from the soil boring. Groundwater was encountered at a depth of 35 feet below ground surface (bgs). The soil sample (01) was collected at a depth of 23 feet bgs. The groundwater sample (02)

was collected at a depth of 35 feet bgs. Each sample container was labeled with the project number, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling and subsequently transported to Pace Analytical, a California Environmental Laboratory Accreditation (ELAP) certified laboratory under strict chain-of-custody procedures.

The soil and groundwater samples were submitted for laboratory analysis of total petroleum hydrocarbons (TPH) as gasoline (TPH-g), TPH as diesel (TPH-d), TPH as motor oil (TPH-mo), and volatile organic compounds (VOCs) by EPA Method 8015 and 8260B.

Results

Terracon has prepared this letter report summarizing the results of field work and laboratory analyses including conclusions and recommendations relative to potential points of regulatory compliance including:

- Hazard Communications (HAZCOMM) considerations for future construction workers in accordance with California General Safety Order §5194;
- Regulatory reporting considerations to Alameda County and/or the California Regional Water Quality Control Board; and
- Waste management considerations including obtaining a temporary U.S. EPA Identification number for wastes that may generated during foundation construction.

Soil

TPH-d was detected in soil at a concentration of 1.02 milligrams per kilogram (mg/Kg). No TPH-g, TPH-mo, or VOCs were detected in the soil sample.

The California Occupational Safety & Health Administration (CalOSHA) permissible exposure limits (PELs) for chemicals[1] does not include diesel fuels (Chemical Abstract No. 68334-30-5). The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Environmental Screening Levels (ESLs) provide levels for Direct Exposure Human Health Risk for residential, commercial/industrial, and construction worker scenarios. The concentration of TPH-d detected in the soil sample is below the RWQCB Environmental Screening Levels (ESLs) for Direct Exposure Human Health Risk Levels for residential, commercial/industrial, and construction worker scenarios. As TPH-d results in soil do not trigger OSHA or ESL thresholds, the presence of TPH-d do not appear to trigger any labor reporting requirement; however, the general contractor (GC) performing the footing installation (i.e. drilling and ancillary tasks) should

[1] https://www.dir.ca.gov/title8/5155table_ac1.html

be notified of the presence of TPH-d for disclosure to employees and subcontractors as may be required by California General Safety Order §5194.

The presence of TPH-d in soil does not trigger a Hazardous Material Release Reporting requirement per California Code of Regulations, Title 19, Division 2, Article 2, sections 2630-2632. According to California Office of Emergency Services (CalOES) release reporting matrix[2], oil discharges to land greater than 42 gallons (1 barrel) shall be reported to CalOES. No information is available of the source, volume, or timing of a release that was detected by this soil sample. The land owner should be notified of the presence of TPH-d in soil. The land owner at the advice of counsel may choose to disclose the presence of TPH-d in soil to the Alameda County Certified Unified Program Agency (CUPA).

Solid waste management considerations include reviewing the potential for listed and/or characteristic wastes. California Code of Regulations Title 22 section 66261.24 (22 CCR § 66261.24) does not list TPH-d. Further, there are no California waste criteria for TPH-d including total threshold limit concentration (TTLC) and soluble threshold limit concentration (STLC).

The acceptance criteria and requirement for any additional soil testing will be defined by the licensed receiving facility accepting this soil. A U.S. EPA facility Identification number may be required for off-site disposal of solid wastes that may generated during foundation construction.

Groundwater

The following VOC detections were reported for the groundwater sample:

- 0.133 micrograms per liter (µg/L) of benzene;
- 9.52 of µg/L methyl tert-butyl ether (MTBE);
- 0.665 µg/L of tetrachloroethene (PCE);
- 0.292 µg/L of toluene; and
- 0.231 µg/L of trichloroethene (TCE).

The California Occupational Safety & Health Administration (CalOSHA) permissible exposure limits (PELs) for these chemicals[3] are inhalation exposures and do not relate directly to the VOCs detected in groundwater. The relevant ESLs may include Direct Exposure Human Health Risk for drinking groundwater and groundwater vapor intrusion. MTBE is the only VOC that exceeds the California Maximum Contaminant Levels (MCLs), at 9.52 µg/L compared to the 5.0 µg/L MCL.

Shallow groundwater from the site is not the source of drinking water and there are no applicable groundwater ESLs for construction workers; however, the general contractor (GC) performing the footing installation (i.e. drilling and ancillary tasks) should be notified of the presence of these

[2] https://www.caloes.ca.gov/FireRescueSite/Documents/Release%20Reporting%20Matrix.pdf
[3] https://www.dir.ca.gov/title8/5155table_ac1.html

VOCs for disclosure to employees and subcontractors for compliance with §5194 – Hazard Communication.

The presence of VOCs in groundwater may trigger a Hazardous Material Release Reporting requirement[2] per California Water Code CWC 13272 (a); California Government Code (CGC) 8670.25.5; 8670.26; and, the California State Oil Spill Contingency Plan. The land owner at the advice of counsel may choose to disclose the presence of VOCs in groundwater to CalOES and or RWQCB.

Waste water exhibits the characteristic of toxicity if representative samples of the waste have any of the following properties:

EPA Hazardous Waste Number	Compound	Regulatory Level (mg/L)
D018	Benzene	0.5
D039	Tetrachloroethylene	0.7
D040	Trichloroethylene	0.5

The detected Toluene and MTBE are not listed wastes; further, the remining detected D-listed wastes were reported at concentrations well below the regulatory levels for benzene, tetrachloroethylene, and trichloroethylene. Although the groundwater does not appear to regulated as a hazardous liquid (based on the concentrations of listed wastes) discharges of these liquid wastes and requirements for any additional testing will be defined by the licensed receiving facility accepting these liquids. Waste management considerations may include obtaining a temporary publicly-owned treatment works (POTW) discharge permit or management as a liquid waste through a licensed treatment facility. A U.S. EPA facility Identification number may be required for off-site treatment of liquid for wastes that may generated during foundation construction.

In summary, impacts to soil and groundwater may require various hazard communication, regulatory reporting, and waste management considerations.

Compound Class	Impacts		Hazard Communication	Reporting to Agencies	Waste Characteristics
	Soil	Groundwater			
TPH-g	No	No	Not Applicable	Not Applicable	Not Applicable
TPH-d	**Yes**	No	**Yes**	Up to Landowner	Exempt; but profile is up to the licensed receiving facility
TPH-mo	No	No	Not Applicable	Not Applicable	Not Applicable
VOCs	No	**Yes**	**Yes**	Yes - State Waters; Any amount of oil or petroleum product; Any Person can notify.	Non-Hazardous waste; may be discharged on site or treated off-site

Discussion

Construction of the billboard foundation is expected to generate excess soils and groundwater that may require special handling. Based on a deepest foundation design scenario, approximately 58 loose cubic yards of soil may be generated, and approximately 25 gallons of static groundwater may be displaced by foundation materials.

While chemical data provided is this report may not be precisely indicative of impacts to soils that will be generated during construction of the billboard, we recommend placing exhumed soils into roll-off bins and performing additional sampling of these soils (at a rate of one composite sample per 250 cubic yards) to develop a waste profile for special handling and disposal, unless a licensed receiving facility has accepted the solid waste without further testing. Based on Terracon's analysis, the soil should be classified as non-hazardous waste; however, a disposal contractor may require additional sampling and analysis at the time of disposal.

Static groundwater that may be displaced by foundation materials should be captured at the surface and contained as a regulated material for waste profiling, special handling and disposal. Terracon understands that the contractor is proposing to contain the water in two 10,000-gallon aboveground storage tanks (ASTs) for disposal at an off-site location. Terracon recommends developing a waste profile for special handling and disposal. Based on Terracon's analysis, the water should be classified as non-hazardous waste; however, a disposal contractor may require additional sampling and analysis at the time of disposal.

Terracon appreciates this opportunity to provide you with our environmental services. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Terracon Consultants, Inc.

DRAFT
Kristin Stout
Environmental Department Manager

DRAFT
Scott Gable, P.G. 6366
Regional Services Specialist

Attachments: Pace Analytical Report, dated April 20, 2021