I declare under penalty of perjury that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Amanda Kobler 1550 Park LLC 2323 Magnolia Street, Suite 2 Oakland, California 94607

Alameda County Case RO0003069 Geotracker Global ID T100002519



WORK PLAN ENVIRONMENTAL SITE ASSESSMENT SOIL AND GROUNDWATER SAMPLING

Residential Condominiums 1550 Park Avenue Emeryville, California Alameda County Case RO0003069 Geotracker Global ID T100002519

> Date: November 19, 2015

> > Prepared for:

1550 Park, LLC Oakland, California Alameda County Environmental Health Alameda, California

Prepared by: Adanta, Inc. 828 School Street Napa, California 94559 (707) 709-8894 Prepared for:

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WORK PLAN ENVIRONMENTAL SITE ASSESSMENT SOIL AND GROUNDWATER SAMPLING Residential Condominiums 1550 Park Avenue Emeryville, California

Project: A1293-2 Date: November 19, 2015

Prepared by:

Nick Patz Project Manager

Reviewed by:

Stephen T. Hnat, PG Professional Geologist



Adanta, Inc. 828 School Street Napa, California 94559 Tel. (707) 709-8894



1.0 INTRODUCTION

Adanta is pleased to provide this Work Plan to conduct an environmental site assessment (ESA) consisting of soil and groundwater sampling for a parcel of land located at 1550 Park Avenue, Emeryville, California (Property; Figure 1 – Property Location Map).

1.1 BACKGROUND

The Property encompasses approximately 0.49 acres of land area. It is currently developed with one two-story brick building with a concrete foundation, and one corrugated metal maintenance building with a concrete foundation. Most of the outside areas of the Property are concrete paved. The main building was apparently constructed in segments, but completed as it is today, prior to 1946. Historically the Property has been in various commercial uses, such as an oxygen supply company, furniture manufacturing company, and refrigeration supply company. Tenant improvements in the 1970s included construction of a residential apartment on the second floor of the building.

Rail lines of the Southern Pacific Rail Road are adjacent to the west. To the north of the Property, is the former location of Technichem. Halleck Street is to the east and Park Avenue to the south. The land uses adjacent to Halleck and Park Avenues near the Property are a mix of new residential, and older commercial, and industrial.

A leaking UST case at the Property was closed by the ACEH under commercial guidelines. ACEH is planning to reopen the case because of the new development use as residential condominiums, and lists the current owner, 1550 Park LLC, as one of three responsible parties for the cleanup of the Property.

In November 2009 a 1,500-gallon capacity UST was discovered under the sidewalk of Park Avenue, that was an apparent heating oil storage vessel for the Property building. The UST was removed and floating petroleum product was observed on the groundwater of the excavation at about six feet below surface, and was pumped from the excavation for disposal. About 20 tons of soil was transported for offsite disposal as nonhazardous waste. TPHg, TPHd, and TPHmo were reported in excess of environmental screening levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in the 20 cubic yards of disposed soil. Based upon subsequent environmental assessments, remaining in-place soil contamination exceeds ESLs for residential development. A letter from ACEH to the former Property owner states "Re-



evaluation of this case is required if land use changes to any residential or other conservative land use or any redevelopment occurs as residual contamination is document to remain in the soil beneath the site. This site is to be entered into the City of Emeryville Permit Tracking System due to the residual contamination on site."

It should be noted that the known contaminated area from the UST is under the sidewalk to the south of the Property, and under Park Avenue. At this time, it is not known if soil or groundwater contamination has migrated beneath the Property.

A 1,500-gallon UST used to store gasoline was removed from the central portion of the Property in 1994. Soil contamination was limited to the upper five feet of soil (20 cubic yards), which was removed and properly disposed. 110 gallons of groundwater was removed from the excavation. When groundwater recharged and was re-sampled it was found that concentrations of contaminants were much lower than initial sampling. One groundwater monitoring well was installed in an assumed down gradient flow direction. Although groundwater was encountered in the boring completed as a monitoring well at a depth of four feet, the monitoring well was not screened until a depth of five feet. Soil samples collected during well installation were reported to not have detected concentrations of contaminants, and water samples collected following well installation were also reported to not have concentrations of contaminants.

Adjacent to the north of the Property is a site that is under DTSC oversight that has soil and groundwater contamination by PCE. The tenant, which caused the contamination (Technichem) no longer occupies the site. The primary contamination at the site is in the approximate middle of the adjacent building, about 100 feet to the north of the Property boundary. Groundwater flow directions calculated during assessments conducted at the Property and the contaminated adjacent site appears to be toward the west and the direction has migrated from southwest to northwest over the period of time groundwater flow has been monitored. If groundwater flow direction remains consistent, contamination from the adjacent site will likely flow toward the railroad tracks to the west and not impact the Property. However, there are numerous factors that effect groundwater flow direction, and the direction can change such that PCE in groundwater at the site could possibly impact the subsurface at the Property.

Proposed Property Use

1550 Park LLC plans to redevelop the Property for commercial and residential use that will have commercial spaces on the ground floor, and residential spaces on the ground and second floors. The exterior of the building would remain as is, however it would be seismically retrofitted. The building interior would undergo significant restoration so it could be used as condominiums and commercial spaces.



2.0 ASSESSMENT ACTIVITIES

Adanta recommends conducting the following general assessment activities:

- FIELD PREPARATION ACTIVITIES
 - Project Meeting
 - Preparation of a Health and Safety Plan
 - Application for Boring Permits
 - o Notification of Underground Services Alert
 - Notification to Department of Public Health
- FIELD ACTIVITIES
 - o Advancing Soil Borings
 - Collection of Soil Samples
 - Collection of Groundwater Samples
 - o Laboratory Analyses of Soil and Groundwater Samples
- REPORT PREPARATION



3.0 FIELD PREPARATION ACTIVITIES

3.1 PROJECT MEETING

The Project manger and staff intended to be involved in this assessment will have a meeting to discuss specific aspects of the technical issues involved in the project. In addition, the Project Manger will relay client and regulatory concerns to staff in order to help avoid project completion delays.

3.2 HEALTH AND SAFETY PLAN

A site-specific Health and Safety Plan (HASP) will be prepared by Adanta prior to commencing field operations. The HASP will address known or potential health and safety hazards that may be present at the Property, and possible precautions to avoid personal injury from the hazards. The HASP will include a map of the Property area with a direct route to the nearest emergency medical facility. Adanta will conduct worker's Health and Safety meetings prior to the commencement of each day's scheduled field activities.

3.3 UTILITY CLEARANCE

At least 72 hours prior to initiating field activities, Adanta will mark the anticipated sampling locations on the surface of the Property and notify Underground Services Alert (USA). USA will notify its database of utility companies to visit the Property to find if the proposed sample locations will potentially impact subsurface utility lines.

In addition, Adanta will contact a utility locator subcontractor to use surface instrumentation to aid in clearing specific boring locations for other underground lines.

3.4 PERMITS

Appropriate permits will be obtained from the Alameda County Environmental Health prior to conducting drilling activities.



3.5 SUBCONTRACTORS

Adanta will arrange for a direct-push technology drilling company to meet us onsite to advance the soil borings and collect soil and groundwater samples from specified depths. For this project it will be necessary to use a limited access drill rig.

We will also arrange for a state-certified laboratory to analyze the soil and groundwater samples produced by the field activities.



4.0 FIELD ACTIVITIES

A total of eight soil borings will be drilled using direct-push sampling equipment to an anticipated total depth of 10 feet below ground surface (bgs).

Adanta will collect soil from depths of approximately five and 10 feet in each boring. In addition, groundwater samples will be collected from each boring. Specific soil sampling depths may be changed in the field dependent on actual depth to groundwater at the time of sampling.

4.1 SAMPLING LOCATIONS

Historical research reported in the Phase I ESA revealed three potential sources of contamination. The site adjacent to the north of the Property has been under regulatory oversight for contaminating soil and groundwater with PCE. Some remediation has been conducted there, however the site remains under DTSC investigative oversight and could be a problematic source of contamination for the Property. Adanta will advance three soil borings near the boundary of the Property with its northern neighbor.

In the central portion of the is a former UST site that obtained regulatory closure. Two borings will be advanced in the area of this former UST to find if subsurface conditions remain the same today.

A former UST was removed from near the southern boundary of the Property. This site had been granted regulatory closure based on a continuing commercial use. However, because the Property is being developed as a Residential development, the site will reopen under regulatory scrutiny. Adanta will advance three soil borings in the vicinity of this UST. Borings will be advanced inside the building, if possible.

Adanta will locate borings on the Property in the approximate locations noted on Figure 2 – Soil Boring Location Map.

4.2 SOIL SAMPLING

Soil samples will be collected in 1¹/₂-inch diameter polypropylene tubes. The sample tubes will be driven into undisturbed soil, the ends of the tubes will be sealed with plastic caps. The tubes will



be labeled with unique identification information and stored in a chest cooled with ice, for delivery to the state certified analytical laboratory. Adanta will follow chain-of-custody protocol.

4.3 GROUNDWATER SAMPLING

Groundwater samples from each soil boring will be collected by placing a temporary PVC well screen into the boring and allowing groundwater to penetrate the well screen. It is anticipated that groundwater will be found at about five feet below existing surface. Disposable polyethylene bailers will be used to collect groundwater. Groundwater samples will be placed into laboratory-cleaned glass containers, labeled with unique identification numbers and placed into an ice-cooled chest for delivery to a State of California-certified analytical laboratory.

4.4 BORING BACKFILL

The borings will be backfilled using Portland[®] cement, and a reasonable attempt will be made to match the surface material.

4.5 INVESTIGATIVE DERIVED WASTES

Investigative derived wastes (IDW) will be containerized and properly disposed following laboratory analysis.

4.7 LABORATORY ANALYSES

Adanta proposes to analyze the soil sample collected from approximately 5 feet below ground surface and archive other samples in the event other analyses become necessary. The environmental laboratory anticipated to be used for this project is BC Labs, Bakersfield, California.

4.7.1 SOIL AND GROUNDWATER

Both soil and groundwater from borings located near the northern boundary of the Property will be analyzed for:

• Volatile organic compounds (VOCs) using U.S. EPA method 8260b



Soil and groundwater samples from the borings in the vicinity of the former UST in the central portion of the Property will be analyzed for:

• Total petroleum hydrocarbons as gasoline (TPHg) diesel (TPHd) and motor oil (TPHmo). Soil samples will be analyzed following silica gel cleanup.

Soil and groundwater samples from the borings in the vicinity of the former UST in the southern portion of the Property will be analyzed for:

• TPHg, TPHd, and TPHmo using US EPA method 8015. Soil samples will be analyzed following silica gel cleanup.



5.0 LIMITATIONS

In today's technology, no amount of assessment can certify that the Property is completely free of environmental concern. It is possible undocumented or concealed conditions at the Property could exist beyond what was found during this soil and groundwater assessment. This work plan is an attempt to satisfy the requirements of Alameda County Environmental Health's requirements for subsurface environmental conditions relative to Residential developments.





Base: Google Maps



1550 Park Avenue Emeryville, California

Project A1293-1

PROPERTY **LOCATION MAP**

FIGURE 1



EXPLANATION



Flow Directions, taken from Technichem and Property historical groundwater data





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