

**The Goodyear Tire & Rubber
Company
Akron, Ohio 44316-0001**

Global Product Quality and Plant Technology

1144 East Market Street, D/814
Akron, Ohio 44316-0001

July 24, 2012

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

RECEIVED

5:26 pm, Jul 25, 2012

Alameda County
Environmental Health

Reference:

**Groundwater Investigation Work Plan
Goodyear Tire Store
1485 1st Street, Livermore, CA
June 28, 2012**

The Goodyear Tire & Rubber Company (Goodyear) retained AECOM Technical Services (AECOM) to complete the above referenced report dated June 28, 2012. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.



Donald E. Stanley
The Goodyear Tire & Rubber Company
Vice President
Product Quality and Plant Technology



AECOM Technical Services
999 W. Town & Country Rd, Orange, CA 92868
T 714.567.2400 F 714.973.9750 www.aecom.com

July 24, 2012

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

**Subject: Groundwater Investigation Work Plan
Goodyear Tire and Rubber Company
SLIC Case #RO3000088
Rynck Tire and Auto Center
DEX #5389
1485 First Street
Livermore, CA 94550**

Dear Mr. Wickham:

AECOM Technical Services, Inc. (AECOM) appreciates the opportunity to provide the Goodyear Tire and Rubber Company (Goodyear) and Alameda County Environmental Health (ACEH) with this Groundwater Investigation Work Plan (GW Work Plan) outlining the proposed groundwater investigation at the above referenced address (the Site). The purpose of the groundwater investigation is to assess possible Total Petroleum Hydrocarbon (TPH) impact to groundwater beneath the site and to evaluate the sources of the impact.

The following sections describe the background, objectives, including the proposed scope of work and associated assumptions based on previous investigations conducted at the site as well as a directive from the ACEH issued on May 14, 2012. The groundwater field investigation, laboratory analysis and reporting will be conducted in accordance with this GW Work Plan and in consultation with the ACEH.

BACKGROUND

In February 2010, URS performed a Phase I Environmental Site Assessment (ESA) and Phase II Limited Subsurface Investigation (LSI) at the Property. A total of seven soil borings were advanced adjacent to the current and former in-ground hydraulic lifts as well as the oil/water separator (OWS). Samples were analyzed for TPH and Volatile Organic Compounds (VOCs). Groundwater was not encountered during the investigation. Boring SB03, which was located at the adjacent in-ground lift in bay 5, had detections of TPH-diesel range (DRO) and -motor oil range (ORO) of 1,600 milligrams per kilogram (mg/kg) and 2,200 mg/kg at the terminal depth (11 to 12 feet), respectively. The DRO levels were above the California Regional Water Quality Control Board (RWQCB) commercial/industrial Environmental Screening Level (ESL) of 83 mg/kg for deep soils (greater than 3 meters below ground surface [bgs] where groundwater is a current or potential source of drinking water). One other boring had TPH levels reported at 2.1 mg/kg and the rest were all non-detect (ND). No VOC detections were reported.

In June 2010 URS performed a Further Site Investigation (FSI) at the Property. A total of five borings were advanced near the in-ground hydraulic lift in bay 5. Samples were analyzed for TPH and VOCs. Groundwater was not encountered during the FSI. TPH-DRO was detected at 1.2 mg/kg in one location. All other samples were reported as ND for VOCs and TPH. The report concluded that the contamination was limited to the area immediately adjacent to the in-ground lift.

In September 2011, AECOM removed the in-ground lift and any visibly impacted soil associated with the lift. Four sidewall confirmation samples and one bottom confirmation sample were collected and analyzed for VOCs and TPH. No TPH-GRO, ORO or VOCs detections were reported. All five samples had TPH-DRO

detections between 1 mg/kg and 4 mg/kg, which are below the RWQCB ESL of 83 mg/kg. A summary report was submitted to the ACEH on April 12, 2012.

On May 14, 2012, the ACEH issued a directive requiring a groundwater investigation be performed at the Site.

Local Geology

The Site is located approximately 474 feet above mean sea level. The Site is underlain by Tertiary, Cretaceous and Jurassic-age rocks. The soil beneath the Site consists primarily of silt from ground surface to 5 feet (ft) bgs transitioning to silty gravel from 5 ft to 12 ft bgs.

Site Hydrogeology

According to nearby wells identified in the Phase I ESA, shallow groundwater reportedly flows towards the west-northwest direction following the surface topography. The regional aquifer is located approximately 45-50 ft bgs. Shallow groundwater has been detected at adjacent site at depths between 28 and 40 ft bgs. No groundwater was encountered at the Site during the Phase II SI, FSI or lift removal activities.

OBJECTIVES

The objectives of this groundwater well investigation are to assess the potential impact of TPH in the shallow water-bearing zone beneath the Site, determine the groundwater flow direction, and to assist in identifying any potential TPH sources and contaminant pathways.

In order to better assess the groundwater beneath the site, the installation of three groundwater hydro-punch locations is proposed: one location adjacent to the former lift, one down gradient of the lift and one up gradient of the lift (to the southeast). Figure 2 shows the proposed hydro-punch locations. The groundwater samples will be used to assess possible impact to groundwater from lift operations. If TPH is present in groundwater, the down-gradient location will assist in determining whether contaminants are migrating off Site.

Scope of Work

Results from this investigation will determine if groundwater beneath the site has been impacted as a result of onsite activities related to the hydraulic lift. Field work activities will be conducted under the direction of a California Professional Geologist and the independent oversight of the ACEH. The scope of work to implement the groundwater hydro-punch sampling activities includes the following:

- Modify and implement the existing site specific health and safety plan (HASP);
- Secure the well permits from the Livermore-Amador Zone 7 Water Agency;
- Visit the Site to pre-mark the hydro-punch locations. Sampling locations are labeled HP-01 through HP-03, (Figure 2);
- Conduct a geophysical survey to verify any potential underground utilities at the 3 proposed sampling locations;
- Utilize a Geoprobe Direct-Push Drilling Rig to advance soil borings and collect groundwater hydro-punch samples;
- Lithologically log borings;
- Submit groundwater samples to a California-certified laboratory for analysis of TPH; and
- Preparation and submittal of a Groundwater Investigation Report.

Health and Safety Plan

The current site-specific HASP will be modified to include groundwater hydro-punch installation and sampling activities. The HASP identifies potential hazards that could be encountered during performance of the proposed subsurface investigation. The HASP will be consistent with current Federal Occupational

Safety and Health Administration (OSHA) requirements for hazardous waste operations [29 Code of Federal Regulations (CFR) 1910.120 (e) and (f) and California Code of Regulations (CCR) Title 8, Section 5192]. The HASP and specific tasks to be accomplished for each work day will be presented to workers in a meeting before initiating fieldwork at the Site on a daily basis.

Permitting

A well permit will be obtained from the Livermore-Amador Valley Zone 7 Water Agency.

Site Clearance

Before conducting any drilling the proposed groundwater monitoring well locations will be identified with marking paint and cleared for potential underground utilities. Prior to marking, each potential location will be surveyed for overhead power lines or other surface structure features that may present a hindrance to drilling. Underground Service Alert (Dig Alert) will be notified at least 48 hours prior to the initiation of subsurface field work, per state law, to allow member entities to mark utilities that may conflict with the proposed boring locations.

A geophysical survey will be conducted prior to drilling activities to clear the proposed hydro-punch locations and to confirm the approximate underground utility locations relative to the proposed locations. Several geophysical methods will be employed, including high-sensitivity metal detection, shallow-focus terrain conductivity, ground-penetrating radar, and/or electromagnetic utility locating.

Hydro-punch Installation

Direct Push Drilling

A truck-mounted, direct-push sampling rig equipped with a hammer and vibrator will be employed to drive the direct-push sampling core barrel into the subsurface to a maximum depth of 40 ft bgs. As the core barrel is advanced, soil is driven into an inner acetate sleeve. After the desired sampling depth is reached, the core barrel rods will be removed from the borehole. Soil will be used for lithologic description and head-space photo-ionization detector (PID) monitoring. After the decontamination of the sampling barrel, a new acetate sleeve will be added, the core barrel, with added sections, is lowered back into the hole, and the process is repeated.

Soil Matrix Sampling

Soil samples will be collected for logging of soil lithology. No soil matrix samples will be collected for analysis.

Groundwater Sampling

Once groundwater is encountered in the boring, a hydro-punch sampling device will be driven to the proper sampling depth. The rod will be withdrawn to expose the screen of the sampling device. A bailer will then be lowered through the rods and the body of the sampler to collect the discrete groundwater samples. Groundwater samples will be analyzed for TPH by Environmental Protection Agency (EPA) Method 8015.

Investigation Derived Waste

All investigation derived waste (IDW) will be stored in Department of Transportation (DOT) approved 55-gallon drums onsite. Each drum will be labeled with the date, contents, and contact information. All IDW will be profiled, manifested and disposed of within 90 days of generation. IDW will be stored at a secure, on-site location until it can be transported off-site for disposal.

Laboratory Analysis

Groundwater samples will be submitted to a California state-certified laboratory for analysis of TPH by EPA Method 8015. The collected samples will be shipped daily via lab courier to the laboratory. Proper preservation of the collected soil samples will be maintained throughout the sample collection and analytical process.

Quality Assurance/Quality Control

As a component of this investigation, quality assurance/quality control (QA/QC) procedures are described below. The QA/QC measures will be implemented for the groundwater sampling and analysis to ensure the reliability and comparability of the data generated during the investigation. Key QA/QC procedures will include the following:

Field QA/QC

- Appropriate documentation will be maintained throughout the field program (e.g., field notes, boring logs, photographs, etc.).
- All reusable sampling equipment will be decontaminated between sampling intervals by washing in a non-phosphate detergent (Alconox®) solution, followed by rinsing in tap water and then distilled/deionized water.
- In order to confirm the effectiveness of the decontamination process, one equipment blank will be prepared and analyzed for each day that wet decontamination procedures are used. Equipment blanks will be analyzed for the same parameters as the soil samples preceding and following the decontamination procedure.

Laboratory QA/QC

The off-site laboratory will be state-certified for all test methods performed. Laboratory data will be reported within the detection limits prescribed by EPA and State of California testing methodologies and guidance. Duplicate samples will be analyzed at a minimum frequency of one per sampling event and will be submitted to the laboratory. Laboratory analyses will include standard QA/QC procedures, including method blanks, matrix spike/matrix spike duplicates, surrogate recoveries, and laboratory control samples appropriate to the test method.

Reporting

A Groundwater Investigation Report presenting the results of the soil and groundwater sampling will be prepared and submitted to Goodyear and the ACEH upon completion of fieldwork. The Report will summarize the field activities and analytical results and will include the following:

- Site description and background
- Description of field activities, methodologies, and observations
- Final copies of boring logs and well construction details
- Map(s) depicting groundwater well locations, along with plotted analytical results (call-outs) for selected chemical parameters
- Data summary tables for all groundwater well analytical results
- Data quality review with all laboratory data


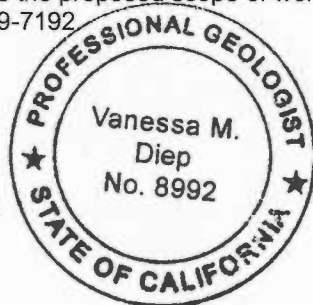
The groundwater investigation will be performed under the supervision of, and reviewed and signed by, a California Professional Geologist.

If you would like to discuss the proposed scope of work, please contact Steve Williams at (714) 689-7280 or Vanessa Diep at (714) 689-7192

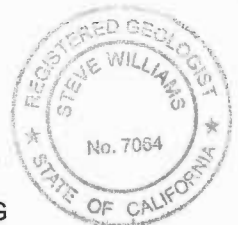
Sincerely,
AECOM Environment



Vanessa Diep, PG
Project Geologist



Steve Williams, PG, CHG
Senior Program Manager



Attachments

Figure 1 – Site Vicinity Map

Figure 2 – Proposed Hydro-punch Locations

Figures



Site Location

Site Location

Rynck Tire and Auto Center # 5389

Date: 12/2011 1485 First Street, Livermore, CA 94550

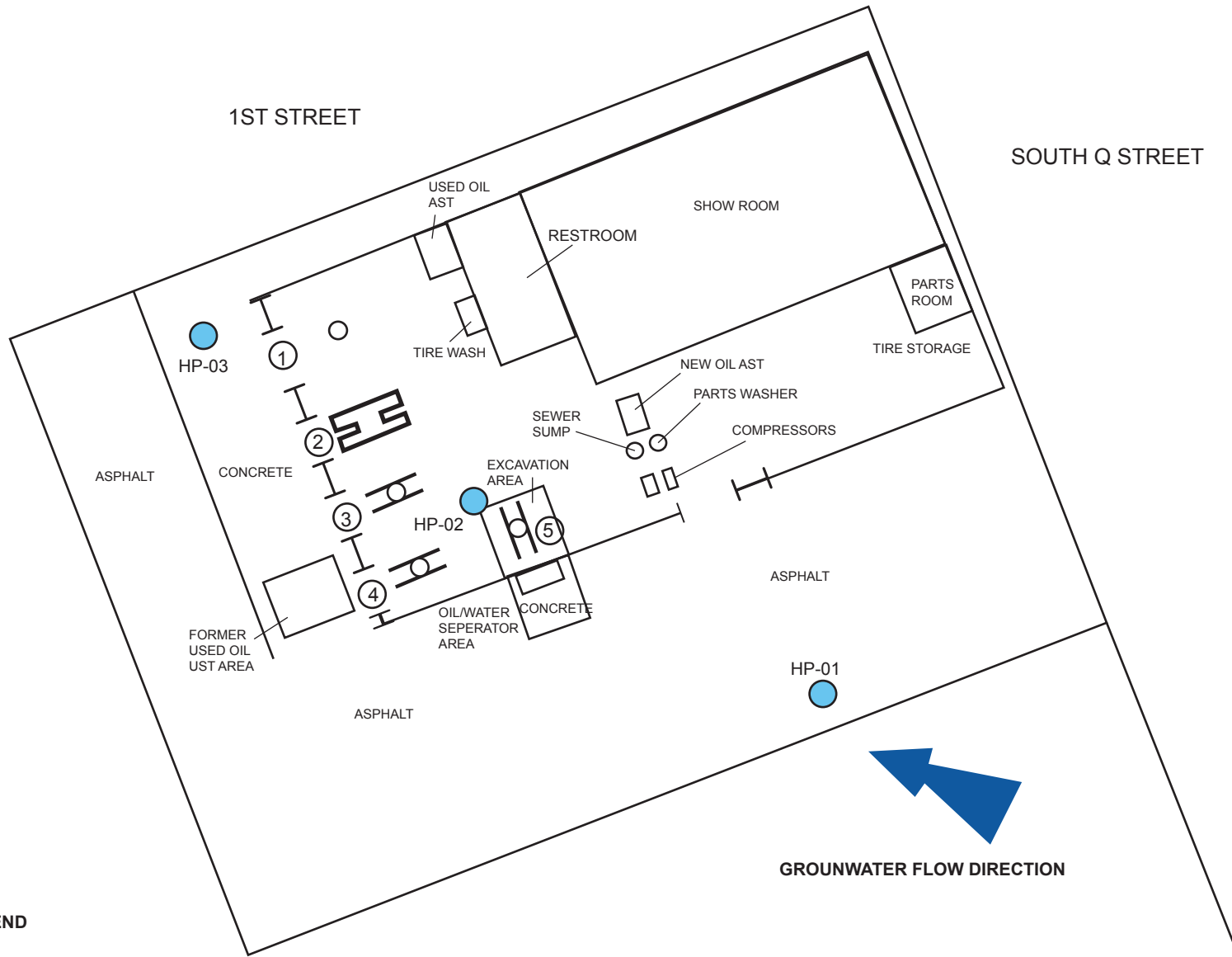
Project No.
60188757

AECOM

Figure

1







LEGEND



- INACTIVE INGROUND SINGLE POST HYDRAULIC LIFT
- ACTIVE INGROUND SINGLE POST HYDRAULIC LIFT
- ACTIVE INGROUND ALIGNMENT RACK

-  PROPOSED GROUNDWATER HYDRO-PUNCH LOCATION
-  SERVICE BAY NUMBER
- AST ABOVE-GROUND STORAGE TANK
- UST UNDERGROUND STORAGE TANK

<p>Proposed Groundwater Hydro-punch Locations Rynck Tire and Auto Center #5389 1485 First Street, Livermore, CA</p>		
Date:	Goodyear Tire & Rubber Company	
Project No.	AECOM	Figure 2