Nowell, Keith, Env. Health

From: gabe stivala <gabe.stivala@atcgs.com>
Sent: Friday, May 18, 2018 1:43 PM
To: Nowell, Keith, Env. Health
Cc: kaye.patterson@usw.salvationarmy.org; Mike Sonke
Subject: RO3084 The Salvation Army Oakland ARC, 601 Webster Street, Oakland, California - Passive Soil Gas Survey Results
Attachments: 2018_Salvation Army Site Plan-FIG 2.pdf; 3898 Beacon PSG Report.pdf

Hi Keith,
On behalf of The Salvation Army (TSA), ATC Group Services LLC (ATC) implemented the first phase of the Workplan for Site Assessment Fall 2017, (workplan) dated September 22, 2017. On February 13-14, 2018, ATC installed 34 passive soil gas (PSG) samplers. Following a residence time of two-weeks, ATC retrieved the PSG sample on February 28. The collected vapor samples were transported under chain-of-custody documentation to Beacon Environmental (Beacon). The results are summarized in the attached Beacon PSG Report.
Based on the PSG survey results, these are our observations:

- The discoloration of surface soils observed by ATC field staff during the installation of a PSG sampler at SA06 supports the hypothesis that at least a portion of the petroleum hydrocarbon release originated from a surface source (e.g. fuel system dispenser/or supply piping) near the northwest corner of the truck enclosure area (TEA).

- The absences and low concentrations of petroleum hydrocarbons reported in the PSG Report within areas of the TEA onsite indicate potential opportunities to define the extent of petroleum hydrocarbons in these areas through the advancement of confirmation borings in this area.

- Offsite petroleum hydrocarbon distribution appears to skirt along the east edge of the Used Car Lot (UCL). ATC recommends installation of confirmation borings within the UCL lot to confirm the lateral extent of dissolved petroleum hydrocarbon in groundwater.

- The chlorinated hydrocarbons detected in two of the westernmost sampling points of the UCL area and in the TEA indicate one or more potential alternate sources of chlorinated compounds to the west of the UCL and to the northeast of the TEA. Note that the TSA property has no history of chlorinated hydrocarbon usage.

In the workplan, following the PSG survey, ATC proposed reviewing the results, and preparing a map proposing the number and type of verification soil and grab groundwater sampling and recommending monitoring wells to quantitatively support the findings of the earlier MIP and PSG surveys.
Based on the PSG results, ATC proposes to install:

- Three (3) soil borings in the TEA to attempt to gain soil and groundwater definition to the northeast, east, and southeast of the TEA, and
- Five (5) soil borings within the UCL to confirm the absence or minimal concentrations indicated by earlier qualitative screening provided by the MIP and PSG sampling to attempt to gain soil and groundwater definition to north, northwest, west in the UCL
- Two(2) monitoring regardless of soil and grab groundwater data proposed. These wells are necessary for horizontal definition of the dissolved-phase petroleum hydrocarbons in the down gradient direction. The proposed monitoring wells include one in the southeast corner of the UCL and one in the southwest corner of the ARC building basement.

Proposed soil boring and monitoring well locations are depicted in **Figure 1**.

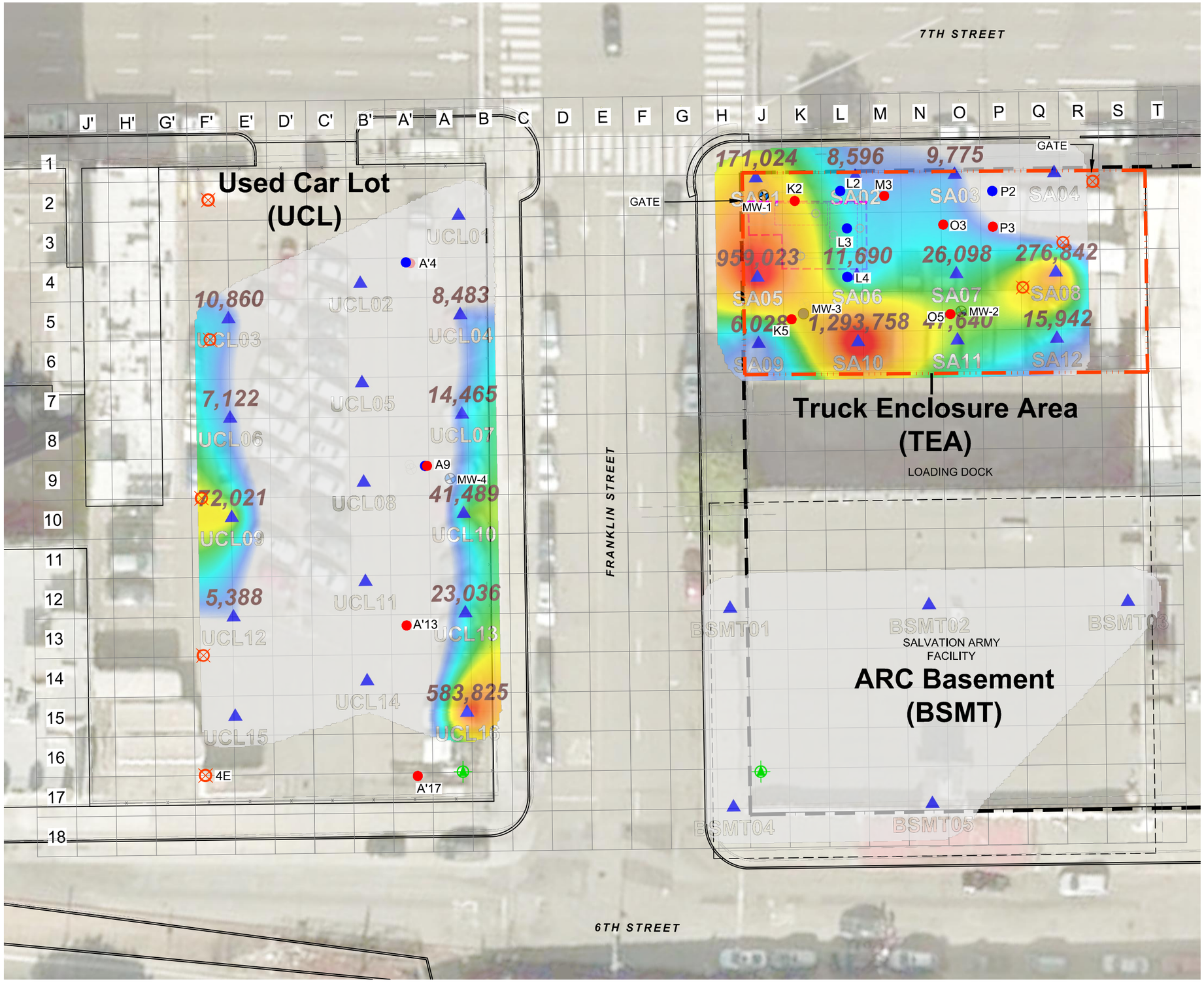
For the drilling of soil borings, the driller will bring sufficient augers/sonic pipe to the site to allow the drill string to remain in boring overnight. The collected soil and grab groundwater samples will be sent to a state certified laboratory for rush analysis overnight. The results of the sampling will be used to determine which, if any soil borings will be completed as monitoring wells the next day. Upon receipt of laboratory data, ATC will share the laboratory results with the ACDEH and discuss the decision to install permanent monitoring wells.

If you have questions or comments, please contact me.

Best regards,

Gabe Stivala, P.G. | SENIOR PROJECT MANAGER | **ATC Group Services LLC**
+1 925 223 7123 mobile | +1 209 579 2225 fax

915 Highland Pointe Drive Suite 250 | Roseville, CA 95678
gabe.stivala@atcgs.com | www.atcgroupservices.com



LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- MIP BORING LOCATIONS
- HSA BORING LOCATIONS
- MONITORING WELL LOCATIONS
- PROPOSED MW LOCATIONS
- PROPOSED SOIL BORING AND GRAB GW SAMPLING LOCATIONS

1,300,000
1,200,000
1,100,000
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0

Color Scale
(nanograms)

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

PROPOSED MONITORING WELL AND SOIL BORING LOCATIONS AND PASSIVE SOIL-GAS SURVEY TPH CR-C9

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

FIGURE 2

DATE: 8-23-17
DRAWN BY: DAW

PROJECT NUMBER: Z054000066
APPROVED BY: M. SONKE

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING
1117 Lone Palm Avenue, Ste. 201
Modesto, California 95351
Ph: (209) 579-2221 *** Fax: (209) 579-2225

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