City of Davenport

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Doc #18928

226 West Fourth Street • Davenport, Iowa 52801
Telephone: 563-326-7711 TDD: 563-326-6145
www.cityofdavenportiowa.com

March 4, 2008

Jean Schumacher
U.S. EPA Region 7 (SUPR/STAR)
901 N. 5th Street
Kansas City, KS 66101

RE: Memorandum - Review of the QAPP Addendum for the Brownfields Assessment
Herzberg Property, Davenport Iowa

Dear Ms. Schumacher:

EPA reviewed the QAAP Addendum for the Brownfields Assessment for the referenced site. EPA listed several Critical Comments and general comments that have been addressed as follows:

Critical Comments:

1. *Once the document is ready for final approval, it will need to be submitted with the dated signatures as shown on this page, including yours as the Project Officer.*

The final document will be submitted with required dated signatures.

2. *§ 2.5. Quality Control Requirements, page 3. In this section you failed to identify the Field QC samples to be collected. You can list them here or reference Attachment 2.1, Table 1.*

A list of the Field QC samples was submitted on Attachment 2.1, Table 1. Section 2.5, page 3 has been updated to reference this attachment.

3. *Attachment 1.3. Problem Definition/Background. This section discusses that "the wells will be developed by surging and then bailing or pumping". Most programs do not allow groundwater VOC samples to be taken by bailing.*

The wells will be developed and sampled using low flow procedures approved by the EPA. Attachment 1.3 has been revised to reflect these procedures.

4. *Attachment 2.1 – Table 1. Field Quality Control Sample Summary. This table includes TDS in the requested analysis but not under the Analytical Method/SOP. This problem needs to be reconciled.*

The analytical method/SOP that will be utilized for TDS is 160.1. Attachment 2.1-Table 1 has been updated to include the TDS Analytical Method/SOP.

5. *Attachment 2.1 – Table 2. Sample Preservation, Analytical Methods, Containers, Volume, and Holding Times. Under Lead and Arsenic the holding time is given as 180 days to extraction/180 days after extraction. The holding time for metals is 180 days.*

The holding time for metals will not exceed 180 days. Attachment 2.1-Table 2 has been updated to reflect this holding time.

6. *Attachment 2-4 – Table 2. Volatile Water 8260 vs Land Recycling Program. For several analytes in this table the MDL is greater than the Land Recycling Limits. How will these MDL discrepancies affect the final decisions to be made from this data? How this data is to be handled needs to be included in the narrative.*

The Iowa Land Recycling Program (LRP) Limit analyte values were derived from risk assessment calculations. Test America Laboratory and the State of Iowa LRP program are aware that the land recycling limits are not attainable on some of the analytes (the method detection limits are higher than the calculated LRP program limits). According to Matt Culp at IDNR, the IDNR is in the process of working with the State Lab (UHL) to develop a more clear set of standards to address this question of MDL and LRP standards. Until then the question of MDL > LRP standards is being addressed site by site. In this case the IDNR states that the MDL's that are higher are still practical and within acceptable range for this project.

General Comments

Attachment 1.4. Schedule of Activities. The schedule only allows 1 week for EPA approval of this Site Specific Addendum. After the EPA project officer completes their review, the routine review turnaround time for the EPA Quality Assurance office is 20 working days. This routine review time should be included in any schedules.

Attachment 1.4, Schedule of Activities has been updated to reflect a 20 working day turnaround time for EPA approval. This turnaround time will be noted for future reviews.

Thank You,

Susanne Knutsen
Economic Development Analyst
City of Davenport

cc: Matt Culp, Iowa DNR
Ralph Heninger, Heninger and Heninger, PC

SS3 – surface soil	Soil	1 soil	Lead, Arsenic
SS4 – surface soil	Soil	1 soil	Lead, Arsenic
SS5 – surface soil	Soil	1 soil	Lead, Arsenic
SS6 – surface soil	Soil	1 soil	Lead, Arsenic
SS7 – surface soil	Soil	1 soil	Lead, Arsenic
SS8 – surface soil	Soil	1 soil	Lead, Arsenic
SS9 – surface soil	Soil	1 soil	Lead, Arsenic
SS10 – surface soil	Soil	1 soil	Lead, Arsenic

*NOTE: Background/QC samples are not included with these totals See Table 1 for a complete sample summary

2.2 **Sample Methods Requirements:**

Matrix	Sampling Method	EPA SOP(s)/Methods
Soil	Spade, trowel, and/or hand auger	EPA SOP 4231.2012
Groundwater	Low Flow / Submersible or Peristaltic Pump	EPA SOP 4230.15A

2.3 **Sample Handling and Custody Requirements:**

☒ Samples will be packaged and preserved in accordance with procedures defined in Region 7 EPA SOP 2420 6C
☒ COC will be maintained as directed by Region 7 EPA SOP 2420 4B
☒ Samples will be accepted according to Region 7 EPA SOP 2420 1C
☐ Other (Describe):

2.4 **Analytical Methods Requirements:**

☒ Identified in attached table (Attachment 2.4)
☐ Identified in attached Analytical Services Request (ASR) Form
☐ Other (Describe):

2.5 **Quality Control Requirements:**

☐ Not Applicable
☐ Identified in attached table
☒ In accordance with the **Generic Quality Assurance Project Plan (QAPP) for the Superfund Site Assessment and Targeted Brownfields Assessment (TBA) Programs (July 2007)** (Attachment 2.1, Table 1)
Describe Field QC Samples to be collected:
☐ Other (Describe):

2.6 **Instrument/Equipment Testing, Inspection, and Maintenance Requirements :**

☐ Not Applicable
☒ In accordance with the **Generic Quality Assurance Project Plan (QAPP) for the Superfund Site Assessment and Targeted Brownfields Assessment (TBA) Programs (July 2007)**
☐ Other (Describe):

2.7 **Instrument Calibration and Frequency:**

☐ Not Applicable
☒ Inspection/acceptance requirements are in accordance with the **Generic Quality Assurance Project Plan (QAPP) for the Superfund Site Assessment and Targeted Brownfields Assessment (TBA) Programs (July 2007)**
☐ Calibration of laboratory equipment will be performed as described in the previously referenced SOPs and/or manufacturers' recommendations
☐ Other (Describe):

Attachment 1.3

Problem Definition/Background

The main objectives are to determine the source of Tetrachloroethylene (PCE) identified in groundwater, and to further investigate lead and arsenic in surface soils at the site exceeding statewide standards.

A Phase I Environmental Site Assessment (ESA) was completed for the site in November, 2006. Recognized environmental conditions (RECs) were not identified at the site, but were identified on the adjoining properties (a scrap metal salvage yard and a Leaking Underground Storage Tank (LUST) site). A Phase II was conducted at the subject site in December, 2006. Results for soil indicated the presence of arsenic and lead within the top 1.5 feet in three out of five soil borings at concentrations that exceed the statewide standards. The maximum lead concentration in the 1.5 foot depth was 827 PPM (SB-3), and the maximum arsenic level was 35.5 PPM (SB-3). In addition, the analyses indicated the presence of arsenic, lead, and the pesticide dieldrin in range 2 sample depths at concentrations that exceed the statewide standards with maximums of 906 PPM lead (SB-5), 291. PPM arsenic (SB-2), and 0.186 PPM Dieldrin (SB-5). Results for groundwater indicate the presence of VOCs in three of the five monitoring wells in excess of statewide standards. The maximum concentration of PCE was identified in SB-1/TMW-1 (1,160 ppb). PCE was also detected in MW-2 (53 ppb) and MW-3 7 ppb). The statewide standard for PCE is 5 ppb. Trichloroethene, vinyl chloride, and benzene were also detected at levels exceeding the statewide standard. The Phase II report was submitted to the Iowa Department of Natural Resources (IDNR)

for review. The IDNR required additional groundwater assessment in the vicinity of TMW1, to determine the source of the PCE. A Supplemental Phase II investigation was completed in April 2007. Lead and arsenic were identified in one soil boring exceeding the statewide standard (SB-9 1280 PPM lead, 20.9 ppm arsenic), in the top 1.5' of the boring. Groundwater samples were collected from five monitoring wells, two completed in bedrock, and three in unconsolidated material. No VOCs were detected in the groundwater samples. The IDNR reviewed the Phase II report, and recommended additional investigation of the PCE plume and/or additional sampling of existing wells, and additional investigation of the lead and arsenic in soil by sampling the shallow soil horizon between 0 and 6 inches, five samples per acre.

The Phase II investigation will include advancing four monitoring wells on the site and nearby city Right of Ways, and collecting 10 surface soil samples at the site see Attachment 2 1 – Figures 1 & 2). Access to the adjacent property was denied by the site owner. The monitoring wells will be advanced using a truck mounted hollow-stem auger drilling machine. Soil samples will not be collected from these borings. The wells will be constructed using 2.0 inch inside diameter (I.D) Schedule 40 PVC slotted screen and 2.0 inch I.D. Schedule 40 PVC riser. The wells will be developed and groundwater samples will be collected using low flow sampling techniques. The wells will be allowed to recharge and samples will be collected and submitted for laboratory analysis. Groundwater samples will also be collected from existing monitoring wells MW6A, MW6B, MW7, MW8, and MW9 and analyzed for VOCs.

Soil samples for lead analysis will be collected with a spade, trowel, and/or hand auger. A composite will be collected within the top six inches of the soil column.

Upon the completion of sampling activities, slug testing will be conducted to evaluate hydraulic conductivity to determine if the groundwater is considered a "protected groundwater source". TDS samples will be collected to determine aquifer classification. Monitoring wells will be surveyed to verify groundwater flow direction.

Attachment 2.1 – Table 1

Field Quality Control Sample Summary

Table 1: Field Quality Control Sample Summary							
Site Name: Herzberg							City: Davenport, IA
Project Manager: Cynthia Quast				Activity #: 20866.01		Date: January 2008	
No. of Samples	Matrix	Location	Purpose	Depth or other Descriptor	Requested Analysis	Sampling Method	Analytical Method/SOP
1[a]	Aqueous	Trip Blank	Field QC	Quality Control	VOCs	2420.11D	8260B
1[b]	Aqueous	Field Blank	Field QC	Quality Control	VOCs, TDS	4230 15A	8260B, 160 1
1[c]	Aqueous	Equipment Rinsate Blank	Field QC	Quality Control	VOCs, TDS	4230.15A	8260B, 160 1
1[d]	Aqueous	Field Duplicate	Field QC	Quality Control	VOCs, TDS	4230 15A	8260B, 160 1
1[d]	Solid	Field Duplicate	Field QC	Quality Control	Lead, Arsenic	4231 2012	6010B, 7060A

Notes:

[a] One per cooler containing liquids for VOC analysis

[b] One per sampling event

[c] One per sampling equipment type, per site mobilization

[d] One per sample media, per site mobilization

Laboratory QA/QC requirements will be conducted in accordance with the TestAmerica Inc Quality Assurance Manual, Effective May 10, 2007 (see Table 2)

Attachment 2 1 - Table 2

Sample Preservation, Analytical Methods, Containers, Volume, and Holding Times

Table 2 – Sample Preservation, Analytical Methods, Containers, Volumes, and Holding Times						
Site Name: Herzberg						City: Davenport, IA
Project Manager: Cynthia Quast			Activity #: 20866.01		Date: January 2008	
Matrix	Parameter	Analytical Method	Container Size	Container Type	Preservative	Holding Time
Solid	Lead, Arsenic	6010B, 7471A	4-ounce	Glass jar	Cool 4°C	180 days
Aqueous	VOCs	8260B	Two 40 mL	Glass Vials	HCl/ Cool 4°C	14 days
Aqueous	TDS	160.1	250 mL	Plastic Container	Cool 4°C	7 days

Attachment 1.4

Schedule of Activities

Assessment and Evaluation of this site is consistent with the Site Specific Addendum to the Generic QAPP and services of contract for this EPA Brownfields Assessment Grant. Factors of weather, response times by regulatory agencies, utility locations, property owners, and subcontractors, and other logistical influences external to Stanley Consultants control will extend the project milestones by equivalent days of delay beyond dates estimated. Stanley Consultants anticipates an expedited review and approval of this Site Specific Addendum to the Generic QAPP by the EPA.

Week 1:	Submission of Site Specific Addendum to EPA Brownfields Project Manager for review & approval
Week 5:	EPA approval of Site Specific Addendum, initiation of mobilization
Week 6:	Notification of EPA Brownfields Project Manager on final field schedules
Week 7:	Completion of utility clearances
Week 8:	Commencement of on-site activities
Week 9:	Completion of on-site field activities
Week 11:	Receipt of written laboratory reports
Week 13:	Final Phase II Report to City and EPA 7