



Item #160860

March 15, 2017

February 27, 2017
P17RA-9999

Ms. Regina G. Embry
Principal Engineer
Gainesville Regional Utilities
Post Office Box 147117, Station A136
301 SE 4th Avenue
Gainesville, Florida 32614-7117

**Re: Proposal for Implementation of the
Remedial Action Plan Modification
Former CSXT Parcel/Depot Park**

Dear Ms. Embry:

Due to remnant coal tar contamination in the subsurface following excavation activities, the Florida Department of Environmental Protection (FDEP) has required Gainesville Regional Utilities to conduct groundwater monitoring to identify whether mobile free product is present in the subsurface, and to evaluate groundwater quality related to the remnant coal tar contamination. Environmental Consulting & Technology, Inc. (ECT) completed one year of groundwater monitoring and received comments from the Florida Department of Environmental Protection (FDEP) on the Year 1, Quarter 4 Post Active Remediation Monitoring Report. The FDEP comments acknowledge the presence of several contaminants of concern at concentrations greater than their groundwater cleanup target levels (GCTLs), with some exceeding their natural attenuation default concentrations (NADCs).

The FDEP agreed with ECT's recommendation for continued monitoring of the groundwater quality until such time that sufficient data exists to make informed decisions regarding the potential need for remedial actions, and whether the remedial actions could consist of long term monitoring. The FDEP has requested a Remedial Action Plan (RAP) Modification (RAPMOD) proposing continued monitoring and identifying the decision criteria to be used to evaluate the groundwater quality data.

In addition, the FDEP requested that an additional monitoring well be installed to assess the extent of benzene and naphthalene in the lower portions of the surficial aquifer.

On January 26, 2017, ECT submitted the requested RAPMOD to the FDEP. On January 31, 2017, the FDEP provided comments regarding the RAPMOD, requesting minor revisions.

The following scope of work has been prepared to comply with the FDEP requests. This proposal has been prepared to identify the projected level of effort to implement the scope of work.

FISCAL YEAR OCTOBER 2016 – SEPTEMBER 2017

Monitoring Well Installation

Per FDEP's request, ECT will coordinate the installation of an additional groundwater monitoring well. The well will serve to provide an additional sampling location in the lower monitoring zone to further assess the extent of benzene and naphthalene. This well will be constructed in a manner similar to existing monitoring well GVG-40DR provided the stratigraphy is similar to that encountered during installation of GVG-40DR. Should the stratigraphy differ, the well construction will be modified so that the well screen is installed in the intended monitoring interval.

For the purposes of this proposal, it is assumed that the new well will be installed to a total depth of 45 feet below land surface and will be constructed using 2-inch diameter, Schedule 40 PVC, and contain 5 feet of 0.006-inch slotted well screen. A filter pack consisting of 30/45 silica sand will be placed in the borehole to a height of 2 feet above the top of the screen. A 5-foot thick seal, consisting of a combination of bentonite and 30/65 silica sand, will be placed on top of the filter pack. Following a sufficient period of time to allow the bentonite to swell, the remainder of the borehole will be filled with a neat cement grout to within 1 foot of land surface. The well will be completed below grade, inside an 8-inch diameter steel manhole supported by a 2-foot by 2-foot by 6-inch thick concrete pad. The concrete pad will contain four 20-inch long lengths of rebar and fiber.

Groundwater Monitoring and Reporting

During Fiscal Year 2016-2017, it is anticipated that two quarters of sampling and reporting will be conducted. It is anticipated that groundwater samples will be collected from 17 monitoring wells and analyzed for the volatile organic aromatics by EPA Method 8260 or equivalent; the polynuclear aromatic hydrocarbons by EPA Method 8270SIM or equivalent method capable of achieving required detection limits, and the petroleum range organics

using the FL-PRO method. Groundwater sampling will be conducted in accordance with the FDEP's Standard Operating Procedures.

As part of the quality control measures, two trip blanks will be analyzed for the volatile organics per sampling event (assuming that each sampling event will take 2 days to conduct). In addition, two equipment blanks and two duplicate samples will be collected and analyzed for the same parameters as the groundwater samples.

Sampling will be conducted quarterly and following each sampling event, a quarterly report will be prepared documenting the field activities, providing copies of the field and laboratory data, tabular and graphical summaries of the data, and a discussion of the results.

Projected Costs

Task	Labor	Expenses and Subs	Totals
Well Installation	\$8,340.00	\$4,725.60	\$13,065.60
Y2Q1 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Y2Q2 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Meetings	\$6,000.00	\$750.00	\$6,750.00
Totals	\$31,700.00	\$18,284.00	\$49,984.00

PROJECTED FISCAL YEAR OCTOBER 2017 – SEPTEMBER 2018

Groundwater Monitoring and Reporting

During Fiscal Year 2017-2018, it is anticipated that four quarters of sampling and reporting will be conducted. The second report will serve as an annual report and will provide a discussion of the trends in the contaminant concentrations and distribution relative to the evaluation criteria outlined in the approved RAP Modification. The annual report will include recommendations to the sampling plan, if warranted.

Projected Costs

Task	Labor	Expenses and Subs	Totals
Y2Q3 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Y2Q4 Monitoring & Reporting	\$11,760.00	\$6,454.80	\$18,214.80
Y3Q1 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Y3Q2 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Meetings	\$6,000.00	\$750.00	\$6,750.00
Totals	\$43,800.00	\$26,417.40	\$70,217.40

PROJECTED FISCAL YEAR OCTOBER 2018 – SEPTEMBER 2019**Groundwater Monitoring and Reporting**

During Fiscal Year 2018-2019, it is anticipated that two quarters of sampling and reporting will be conducted. The second report will serve as an annual report and will provide a discussion of the trends in the contaminant concentrations and distribution relative to the evaluation criteria outlined in the approved RAP Modification. The annual report will include recommendations to the sampling plan, if warranted. It is anticipated that the data generated during the two years of monitoring approved by the FDEP will document that the site qualifies for No Further Action and that a Site Rehabilitation Completion Order can be pursued at that time.

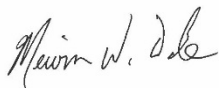
Projected Costs

Task	Labor	Expenses and Subs	Totals
Y3Q3 Monitoring & Reporting	\$8,680.00	\$6,404.20	\$15,084.20
Y3Q4 Monitoring & Reporting	\$11,760.00	\$6,454.80	\$18,214.80
Meetings	\$6,000.00	\$750.00	\$6,750.00
Totals	\$26,440.00	\$13,609.00	\$40,049.00

Please let us know if you have any questions regarding this information.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Mervin W. Dale, P.G.
Staff Scientist II



Mark A. Culbreth, P.G.
Principal Hydrogeologist
Assessment & Remediation Service Line Leader

Cc: Ruth Martin