



# City of Grand Island

Tuesday, December 18, 2018

Council Session

## Item G-6

**#2018-379 - Approving Amendment No. 1 to Environmental Monitoring Services for the Grand Island Regional Landfill**

Staff Contact: John Collins, P.E. - Public Works Director

# **Council Agenda Memo**

**From:** Jeff Wattier, Solid Waste Superintendent

**Meeting:** December 18, 2018

**Subject:** Approving Amendment No. 1 to Environmental Monitoring Services for the Grand Island Regional Landfill

**Presenter(s):** John Collins PE, Public Works Director

## **Background**

The City of Grand Island leased approximately 47.5 acres of private land located in Southeast Hall County from July 1966 through February 1984 to operate a landfill disposal facility to accept municipal waste in accordance with State rules and regulations. Following a local complaint to the Nebraska Department of Environmental Quality (NDEQ) in 2007 regarding groundwater in the vicinity of the closed landfill, the NDEQ conducted a preliminary assessment and site investigation. Groundwater sampling conducted during the site investigation detected four (4) volatile organic compounds (VOC) along the East property boundary at concentrations greater than their respective maximum contaminant levels (MCL). The NDEQ then hired a consulting firm to perform a Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Site Investigation, which was submitted to the NDEQ on October 25, 2010.

On October 16, 2013, the City of Grand Island received a letter from the NDEQ requiring the City to perform a Step 7 Detailed Site Assessment (DSA) for this property pursuant to Nebraska revised statutes, Title 118 – Groundwater Quality Standards and Use Classification. The purpose of the Step 7 DSA was to collect sufficient information to confirm whether or not the source of the contaminants is the former Grand Island Disposal Area. The City submitted a work plan for the Step 7 DSA to the NDEQ on March 10, 2014. This work plan was subsequently approved by the NDEQ on March 31, 2014.

On November 7, 2018, the City of Grand Island received notice from NDEQ for development of a Remedial Action Work Plan.

## **Discussion**

The Solid Waste Division of the Public Works Department is responsible for the operation of the City's 330 acre solid waste landfill. The landfill is in Hall County and located seven (7) miles north of Shelton, Nebraska at 19550 West Husker Highway, just east of the Hall/Buffalo County Line.

On November 6, 2018, via Resolution No. 2018-338, City Council approved an agreement with Olsson Inc. of Lincoln, Nebraska in the amount of \$89,100.00 for environmental monitoring services at the Grand Island Regional Landfill.

At this time an amendment is recommended to the original agreement with Olsson, Inc. to address the Remedial Action Work Plan required by NDEQ, which are similar services to the original agreement. The scope of the original agreement is being expanded to include the old landfill. Such services will be provided on a time and expense basis not to exceed \$12,000.00, resulting in a revised agreement amount of \$101,100.00.

## **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

## **Recommendation**

City Administration recommends that the Council approve Amendment No. 1 to the original agreement with Olsson, Inc. of Lincoln, Nebraska, in the amount of \$12,000.00.

## **Sample Motion**

Move to approve the resolution.

# **LETTER AGREEMENT AMENDMENT #1**

Date: December 7, 2018

This AMENDMENT ("Amendment") shall amend and become a part of the Letter Agreement for Professional Services dated October 29, 2019 between the City of Grand Island, Nebraska ("Client") and Olsson, Inc. ("Olsson") providing for professional services for the following Project (the "Agreement"):

## **PROJECT DESCRIPTION AND LOCATION**

Project is located at: Phillips, Nebraska

Project Description: Remedial Action Work Plan for the Former Grand Island Disposal Area

## **SCOPE OF SERVICES**

Client and Olsson hereby agree that Olsson's Scope of Services under the Agreement is amended by adding the services specifically described below for the additional compensation set forth below:

### **Phase 300 – Remedial Action Work Plan**

- Compare NDEQ proposed Preliminary Cleanup Levels to available groundwater data. If desired, propose alternate cleanup levels to NDEQ prior to the February 5, 2019 deadline.
- Develop a Remedial Action Work Plan (RAWP) meeting the requirements of the letter from Nebraska Department Environmental Quality dated November 7, 2018. The RAWP will detail actions that will be initiated in response to the groundwater contamination occurrence and is anticipated to include up to:
  - Institutional control requirements
    - Outlines the domestic well installation watch area to be implemented and contingency plan if potable water supplies are found to be threatened by contamination
  - Groundwater Monitoring Sampling and Analysis Plan (SAP)
    - Assumes a SAP similar to the active landfill is approved by NDEQ
  - Groundwater Monitoring Well Construction Plan
    - Includes construction details of the additional wells being required
  - Cleanup Levels
  - Landfill Cap Operation & Maintenance (O&M) Plan
    - Plan will likely focus on vegetation requirements and prevention of ponding water on cap. May require filling of "duck pond" located over the landfill.
- Includes preparation of a draft remedial action work plan, response to NDEQ comments, and finalization of the plan.
- Excludes site visit.

## **SCHEDULE FOR OLSSON'S SERVICES**

Unless otherwise agreed, Olsson expects to perform its services covered by this Amendment as follows:

Anticipated Start Date: January 2, 2019

Anticipated Completion Date: May 15, 2019

Olsson will endeavor to start its services on the Anticipated Start Date and to complete its services on the Anticipated Completion Date. However, the Anticipated Start Date, the Anticipated Completion Date, and any milestone dates are approximate only, and Olsson reserves the right to adjust its schedule and any or all of those dates at its sole discretion, for any reason, including, but not limited to, delays caused by Client or delays caused by third parties.

## COMPENSATION

For the additional Scope of Services specifically set forth in this Amendment, Client shall pay Olsson the following fee in addition to the fee(s) set forth in the Agreement:

## COMPENSATION

Client shall pay to Olsson for the performance of the Scope of Services, the actual time of personnel performing such services, and all actual reimbursable expenses in accordance with the Labor Billing Rate Schedule(s) and the Reimbursable Expense Schedule attached to the original Agreement. Olsson shall submit invoices on a monthly basis and payment is due within 30 calendar days of invoice date.

Olsson's Scope of Services will be provided on a time and expense basis not to exceed \$12,000.

## TERMS AND CONDITIONS OF SERVICE

All provisions of the original Agreement not specifically amended herein shall remain unchanged.

If this Contract Amendment satisfactorily sets forth your understanding of our agreement, please sign in the space provided below. Retain a copy for your files and return an executed original to Olsson. This proposal will be open for acceptance for a period of 30 days from the date set forth above, unless changed by us in writing.

## OLSSON, INC.

By   
Jason Byler, PE

By   
Bill Imig, CHMM

By signing below, you acknowledge that you have full authority to bind Client to the terms of this Amendment. If you accept this Amendment, please sign:

## City of Grand Island, Nebraska

By \_\_\_\_\_  
Signature

Printed Name \_\_\_\_\_

Title \_\_\_\_\_

Dated: \_\_\_\_\_



November 7, 2018

Marlan Ferguson  
City Hall  
100 E. First St.  
Grand Island, NE, 68801

RE: Former Grand Island Disposal Area (Closed), Phillips, Nebraska  
NDEQ ID: 64602  
Program ID: IWM NE0054411  
Subject: Conditional Approval of Step 7 Detailed Site Assessment Report  
and Notice of Remedial Action Classification, Preliminary Cleanup Levels  
and Proposed Remedial Actions

Dear Mr. Ferguson:

The purpose of this letter is to provide Nebraska Department of Environmental Quality (Department) conditional approval of the Report for Step 7 Detailed Site Assessment for the Former Grand Island Disposal Area (Closed) near Phillips, Nebraska dated July 15, 2018. The report is approved under the condition that this letter and the enclosed memo are included as an addendum at the front of the report. The Department will attach the letter and memo for inclusion in the Administrative Record. This letter also serves to inform you of the next steps regarding the pollution occurrence.

As required by Title 118, Groundwater Quality Standards and Use Classification, Chapter 10, "Remedial Action Provisions for Point Source Groundwater Pollution Occurrences," the City of Grand Island must now evaluate proposed remedial actions in accordance with Title 118, , Appendix A, Step 8. Step 8 consists of the following sub-steps: a) the Department classifies the pollution occurrence, defines preliminary cleanup levels and proposes remedial actions; b) the City of Grand Island optionally proposes alternate cleanup levels; c) the Department proposes, and following a public notice period, selects the final cleanup levels and final remedy; and d) the City of Grand Island submits, for Department review and approval, a remedial action work plan.

The Department has assigned the groundwater pollution occurrence at the site a Remedial Action Class (RAC) of 1, due to the groundwater pollution occurrence being within 500 feet of a domestic well. RAC-1 generally receives the most extensive remedial action measures. However, due to the low contaminant concentrations NDEQ is proposing long-term monitoring of the groundwater until these cleanup levels are achieved, landfill cap maintenance, and institutional controls. The long-term monitoring should include all currently installed monitoring wells, an additional well cluster between former direct push locations GP06 and GP07 (please see attached memo), and the domestic well located near the MW05 cluster. Groundwater monitoring shall also include periodic sampling of the additional domestic wells in the

immediate vicinity of the former landfill. The institutional controls should include a watch area to determine if any new domestic wells have been installed near the site, with a contingency plan to provide alternate water if the need arises. Should groundwater trends indicate increase in a contaminant concentration, additional remedial actions may be required.

The Department is required to establish preliminary cleanup levels for cleanup required in RAC-1 occurrences. The preliminary cleanup levels are as follows:

Chemical	Preliminary cleanup level (ug/L)
Acetone	3,500
Benzene	5
Bromodichloromethane	100
2-Butanone	1,400
Chlorobenzene	100
Chloroform	100
1,2-Dichlorobenzene	600
1,4-Dichlorobenzene	75
cis-1,2-Dichloroethene	70
trans-1,2-Dichloroethene	100
1,2-Dichloropropane	5
Ethylbenzene	700
Isopropylbenzene	110
Naphthalene	0.17
N-Propylbenzene	160
Tetrachloroethene	5
Tetrahydrofuran	Background
Toluene	1,000
Trichloroethene	5
1,2,4-Trimethylbenzene	14
1,3,5-Trimethylbenzene	15
Vinyl Chloride	2
Xylene (Total)	10,000
ug/L - micrograms per liter Based on Nebraska Title 118 Maximum Contaminant Levels- MCLs; or NDEQ Voluntary Cleanup Program (VCP) Remediation Goals- RGs; or EPA Regional Screening Levels	

If you wish to propose alternate cleanup levels in accordance with Title 118, Appendix A, Step 8, please submit your proposal in writing within 30 days of the date of this letter. If the Department does not receive such a proposal by this date, the preliminary cleanup levels will be public noticed along with the proposed remedial actions. Following public notice of the cleanup levels, the City of Grand Island will need to submit, for NDEQ review and approval, a remedial action work plan.

Please feel free to contact me at (402) 471-2326 or [Stacey.Stricker@Nebraska.gov](mailto:Stacey.Stricker@Nebraska.gov), if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script that reads "Stacey Stricker".

Stacey Stricker  
Groundwater Geologist  
Remediation Section  
Land Management Division.

cc: Tim Luchsinger, Utilities Department Director (w/ enclosure)  
Jeff Wattier, Solid Waste Superintendent (w/ enclosure)



## Memorandum

To: File  
From: Stacey Stricker  
Date: November 7, 2018

RE: Former Grand Island Disposal Area (Closed), Phillips, Nebraska  
Facility ID: 64602  
Program ID: IWM NE0054411  
Subject: Report for Step 7 Detailed Site Assessment, Revision 3,  
dated July 15, 2018, received August 9, 2018

To support the Nebraska Department of Environmental Quality's (NDEQ) decision to proceed to remedy selection without requesting further revision to the above referenced Step 7 report, I prepared this memo to document my review and recommend actions.

Some of my requested revisions were not implemented in the final report and I have outlined the deficiencies below. I also do not concur with all of the findings presented in the Step 7 report.

Please note that my comments, which were sent to the City of Grand Island on April 30, 2018, were inaccurately replicated in the response to comment letter accompanying the report, possibly due to transcription or computer errors. Please refer to NDEQ's April 30, 2018 comment letter to see the correct version of my comments.

Revisions not made to the report in accordance with the NDEQ comment letter are as follows:

- **Section 4.1** was inadequately revised to discuss the deficiency of the vinyl chloride field laboratory reporting limit and the uncertainty of the vinyl chloride non-detect values, in accordance with Comment #1 of the NDEQ comment letter. The narrative should state, **"Please note that the field laboratory reporting limit for vinyl chloride was 10 ug/L, which is above the maximum contaminant level of 2 ug/L for vinyl chloride, and results in uncertainty of any reported concentration below 10 ug/L, including any non-detect values."**  
In addition, other errors were found. Table 3, which is within Section 4.1, should have some 'J' code qualifiers removed in order to match the June 2014 and August 2014 Test American Analytical Reports presented in Appendix F. The TCE results for GP09 (DUP) 68-72 ft should be 2.64 rather than 3.64.
- The last sentence of **Section 4.2** should state, **"The low levels of organic vapor could be attributed to a suspected surface spill"** in accordance with Comment #2 of the NDEQ comment letter.
- The sampling depth for the **9-8-2016 GP06 sample on Table 5** should be **28-31 ft** in accordance with Editing Comment #3 and the response to Comment #9.
- The notes to the **Detected Volatile Organic Compounds table in Appendix F** were not revised to address Comment #8. The table notes should state, ***"\*All samples for the July 2015 Sampling event were received at the laboratory at 18 degrees Celsius and the results may be biased low"***.

I do not concur with a principal conclusion of the report (final sentence of Section 6.0), "*...the horizontal and vertical extents of migration of the contaminant plumes have adequately been delineated.*" This claim is based on a "*non-detect*" sample collected at a well or Geoprobe location located hydraulically downgradient or vertically below the sample exhibiting the elevated levels." however, the claim overlooks the fact that many "*non-detect*" sample results cannot be used due to either poor sample quality or improper detection limit, as discussed in greater detail below.

The groundwater sampling data does not allow the shallow vinyl chloride plume to be precisely delineated to the north of MW03, which has had vinyl chloride concentrations between 2.23 and 12 ug/L. The maximum contaminant level (MCL) for vinyl chloride is 2 ug/L. While it can be determined that the shallow vinyl chloride plume ends somewhere between monitoring well MW03A and direct push location GP08, a distance of 1,200 feet, the "*non-detect*" results from GP06 and GP07, which were located between MW03A and GP08, cannot be used to bound the plume due to detection limits which were too high or poor sample quality. The reporting limits for vinyl chloride at GP07 were 10 ug/L for the June 2014 samples and 5 ug/L for the September 2016 sample, which are above the MCL for vinyl chloride. GP06 also had a reporting limit of 10 ug/L for vinyl chloride for the June 2014 sampling. The September 2016 groundwater sample for GP06 arrived at the laboratory with noticeable headspace. Headspace allows for certain contaminants, such as vinyl chloride, to volatilize out of the sample.

The data gap for the northern boundary of the shallow vinyl chloride plume should be addressed by installing an additional well cluster north of MW03 between former direct push locations GP06 and GP07. A watch area should also be established for new wells between the landfill property and the housing development northeast of the site.

In addition to the above items, the City of Grand Island should conduct long-term monitoring of the site monitoring wells and the domestic well near MW05. Periodic sampling of the additional three unregistered domestic wells within ¼ mile of the site should also be conducted. These domestic wells can be added to the long-term monitoring events should contaminant trends in MW01 and MW04 warrant their inclusion.

RESOLUTION 2018-379

WHEREAS, on November 6, 2018, via Resolution No. 2018-338 the Grand Island City Council approved entering into an agreement with Olsson, Inc. of Lincoln, Nebraska in the amount of \$89,100.00 for Environmental Monitoring Services for the Grand Island Regional Landfill; and

WHEREAS, the original agreement is now being amended to include the Remedial Action Work Plan required by the Nebraska Department of Environmental Quality (NDEQ) pertaining to the previously leased 47.5 acres of private land used to operate a landfill disposal facility in southeast Hall County from July 1966 through February 1984 for the City; and

WHEREAS, such amendment is in the amount of \$12,000.00, for a revised agreement amount of \$101,100.00; and

WHEREAS, Amendment No. 1 to the original agreement with Olsson, Inc. of Lincoln, Nebraska is required to proceed with this project

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that Amendment No. 1 with Olsson, Inc. of Lincoln, Nebraska for the Remedial Action Work Plan is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such amendment on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 18, 2018.

\_\_\_\_\_  
Roger G. Steele, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	☐ _____
December 14, 2018	☐ City Attorney