



Division of Public Works .  
1000 South Houser St.  
Muscatine, IA 52761

Recycling Center and Transfer Station

Phone (563) 263-9689  
Fax: (563) 263-9689

## MEMORANDUM

To: Mayor and City Council Members

Recycling Center  
Transfer Station  
Landfill Operations  
Refuse Collection

Cc: Gregg Mandsager, City Administrator

From: Laura Liegois, Solid Waste Manager

Date: July 12, 2012

### Re: Request for Purchase Order for Ground Water Sampling Geoprobe Drilling Services

#### **Introduction:**

In 2007, the Iowa Department of Natural Resources made changes to the Municipal Solid Waste Landfills in Iowa. Part of the changes, included the levels of ground water quality for Iowa landfills. The Muscatine County Landfill, along with other landfills in Iowa is working to comply with the Iowa DNR rules. The new rules do not take into affect the older sections of landfills that have waste from years ago of materials that we currently do not dispose of. This includes appliances, electronic waste, and other hazardous waste. Muscatine County Landfill is not the only landfill handling compliance issues due to the new regulations.

The Muscatine County Landfill has one well that is located next to a neighboring property, that needs to have additional exploratory sampling to determine if a water plume is on the neighbors property from our property.

#### **Background:**

In the summer of 2010, Muscatine County Landfill was notified of three well issues testing high for the levels of Volatile Organic Compounds or VOC's. Due to additional wells added in 2011, one well has been remediated. The second well is being retested and we are waiting on the results. The levels in that well are close to guidelines. The third well, which is located next to a neighboring property, still is testing high for the levels of VOC's.

Staff has meet with the Iowa DNR with our engineering firm, HLW Engineering to discuss options on handling the third well. Iowa DNR wants a sample taken from the neighboring property to determine if a plume from this well is there. This section is around the older section of the landfill.

During our meeting with Iowa DNR, staff discussed a request from a year and half ago to the Iowa DNR to allow Appendix 2 sampling to be allowed once every five years. This sampling variance has been allowed for other landfills. Iowa DNR is willing to allow five year sampling for the Muscatine County Landfill, once we have moved forward with determining the issues from the monitoring well near the neighboring property.

The sampling allowed to be scheduled once every five years would save \$60,000.00 in the landfill budget over the five-year period. Each year it is costing \$15,000.00 for Appendix 2 sampling to occur.

Staff and HLW Engineering have spoken to the neighbor in regards to the work we need to accomplish. The neighbor agrees to allow geoprobe sampling to occur on their property. Staff and HLW Engineering will be communicating with the neighbor through the process to get the sampling needed. Ten (10) geoprosbes will be placed and sampling will be taken place within a one-week period. Sampling will be scheduled in August or early September 2012.

Through HLW Engineering, pricing was received for the geoprobe services that are needed. The following quotes were received:

Team Services, Des Moines, Iowa - \$17,235.00

Terracon, Bettendorf, Iowa - \$23,312.50

Cahoy Well and Pump Services – Fredericksburg, Iowa - \$28,850.00

Rewerts Well Company – Nevada, Iowa – No Response

**Recommendation:**

It is staff's recommendation that the City of Muscatine issue a purchase order to Team Services for \$17,235.00 for the geoprobe services for water sampling. The cost of this work will be used from the laboratory and the improvement repair line items in the 2012-2013 Landfill Budget. Due to the ability to not have Appendix 2 sampling requirements, the \$15,000.00 sampling can be utilized for this project. The remainder \$2,735.00 can be taken from the \$25,000.00 improvement repair line item.

If you have any further questions in regards to this agreement, please contact me.