



CITY OF  
TUCSON  
ENVIRONMENTAL  
SERVICES

February 1, 2013

**VIA HAND DELIVERY**

Mr. Marc E. Herman, Project Manager  
Superfund Programs Unit/Southern Regional Office  
Arizona Department of Environmental Quality  
400 W. Congress St., Suite 433  
Tucson, AZ 85701



**Re: Silverbell Landfill WQARF Site  
Sampling Plan Revision**

Dear Mr. Herman:

The City of Tucson, Environmental Services (COT-ES) has monitored groundwater quality at Silverbell Landfill Water Quality Revolving Fund Site (WQARF) since 1985. The current sampling list was last modified in November 2007 to include monitoring of perimeter wells in October and a site-wide sample event in April. COT-ES would like to update the monitor well list and schedule for the Silverbell Landfill.

Since the 2007 revision, COT-ES has installed and monitored 11 new wells. Other monitoring wells listed for monitoring in 2007 are nearly dry or have been abandoned (R-076A, WR-206A, and WR-243A). The updated sampling list incorporates the new monitoring wells and removes wells that can no longer be used.

At the request of the Arizona Department of Environmental Quality (ADEQ), COT-ES prepares a regional water level map incorporating data from Sweetwater Recharge Facility, Silverbell Landfill, Silvercroft Wash Release Site, and Miracle Mile WQARF site (Figure 1) in October of each year. COT-ES proposes to change the Silverbell Landfill site-wide water quality monitoring event from April to October in order to align our data collection and reporting schedule with the preparation of the regional flow map and the routinely scheduled water quality monitoring event for the Miracle Mile site.

The April perimeter monitoring event will evaluate whether there have been significant changes to the lateral extent of the plume. The proposed April well list is shown on Table 1 and Figure 2. Water level data will be collected from all wells with sufficient water to measure and used with water level data collected by Tucson Water as part of their routinely scheduled April sample event to contour a water table map for the Silverbell Landfill and Sweetwater Recharge Facility. All samples collected by COT-ES will be analyzed for VOCs by EPA Method 8260B. A letter summarizing the results of the April sampling event, including the water table map and tabulated analytical data, will be submitted to ADEQ in June of each year.



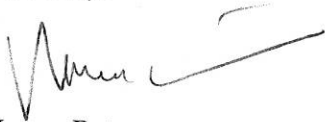
Also depicted on Figure 2 and Table 1, are the wells sampled quarterly by COT-ES for Kinder Morgan as part of their investigation of the gasoline plume from the Silvercroft Wash Release Site (Figure 1), which has migrated onto the Silverbell Landfill WQARF Site. COT-ES is not responsible for the gasoline contaminants, but assists Kinder Morgan with their quarterly sampling efforts. Results from 7 of the 9 wells used by Kinder Morgan to delineate the gasoline plume are not required to delineate the plume from the Silverbell site and are not included on the April COT-ES sample list.

The site-wide monitoring event is proposed for October of each year. Water level data will be collected from all wells with sufficient water at the Silverbell Landfill and used with data from surrounding sites to generate a regional water table map. The monitoring wells listed on Table 1 will be monitored for VOCs, anions, and metals as specified in the approved Sample and Analysis Plan. The wells proposed for the October sampling are shown in Figure 3. Results from 6 of the 9 wells used by Kinder Morgan are not required to delineate the Silverbell Landfill plume and are not included in the October sample list.

An annual report and discussion of the data for both April and October sample events will be submitted in February of the following year. The annual report will also contain the regional water table map requested by ADEQ, as well as isoconcentration maps for contaminants of concern, field forms and analytical data packages.

Please contact Molly Collins at (520) 837-3703 if you have any questions regarding these proposed changes.

Sincerely,



Nancy Petersen  
Deputy Director

NP/MC/nr

Enclosures:

Table 1: Well and Parameter List  
Figure 1: Silverbell Landfill Location Map  
Figure 2: April Monitoring Well Network  
Figure 3: October Monitoring Well Network

cc: William Ellet, Arizona Department of Environmental Quality  
Greg Hess, Clear Creek Associates (email copy)  
Wally Wilson, Tucson Water (Email Link)  
Bruce Prior, Tucson Water (Email Link)  
Molly Collins, COT, ES (Email Link)  
Silverbell Landfill Central File

**TABLE 1**  
Well and Parameter List  
April and October Sample Events  
Silverbell Landfill

COT-ES  
April Semiannual Sample Event

Well ID	Parameter List
SLM-514A	A
SLM-514M	A
SLM-515A	A
SLM-515M	A
SLM-541	A
SLM-545M	A
SLM-546A	A
SLM-546M	A
SLM-547	A
SLM-552M	A
SLM-553M	A
WR-092B (TW)	A
WR-093A	A
WR-182A	A
WR-198M	A
WR-205A (TW)	A
WR-205M	A
WR-268A	A
WR-431A	A
WR-432A	A
WR-433A	A
WR-433B	A
WR-433M	A
WR-463A	A
WR-464A	A
WR-473A	A
WR-473M	A
Z-012A	A

COT-ES  
October Annual Sample Event

Well ID	Parameter List
A-039A	B
MW-04A	B
PC-001-250	A
PC-001-300	A
R-76B	B
SLM-514A	B
SLM-514M	B
SLM-515A	B
SLM-515M	B
SLM-541	B
SLM-545A	A
SLM-545M	A
SLM-546A	B
SLM-546M	B
SLM-547	B
SLM-552A	B
SLM-552M	B
SLM-553M	A
WR-092B (TW)	B
WR-093A	A
WR-182A	B
WR-198A	B
WR-198M	B
WR-205A (TW)	B
WR-205M	B
WR-268A	B
WR-431A	B
WR-432A	B
WR-433A	B
WR-433B	B
WR-433M	B
WR-463A	B
WR-464A	B
WR-473A	B
WR-473B	B
WR-473M	B
Z-012A	A

Kinder Morgan Quarterly Sample List

Well ID	Parameter List
A-039A**	A
R-067A	A
R-122A	A
WR-242A	A
WR-359A	A
WR-430A	A
WR-463A*	A
WR-464A	A
WR-467A*	A

List	Parameter	Method
A	VOCs	EPA 8260
B	VOCs	EPA 8260
	Zinc	EPA 200.7
	Sodium	EPA 200.7
	Silver	EPA 200.7
	Potassium	EPA 200.7
	Manganese	EPA 200.7
	Magnesium	EPA 200.7
	Iron	EPA 200.7
	Copper	EPA 200.7
	Chromium	EPA 200.7
	Calcium	EPA 200.7
	Cadmium	EPA 200.7
	Barium	EPA 200.7
	Selenium	EPA 200.8
	Lead	EPA 200.8
	Arsenic	EPA 200.8
	Mercury	EPA 245.1
	Sulfate	EPA 300.0
	Phosphate as P	EPA 300.0
	Nitrite as N	EPA 300.0
	Nitrate as N	EPA 300.0
	Fluoride	EPA 300.0
	Chloride	EPA 300.0
	Bromide	EPA 300.0
	Ammonia As N	EPA 350.1
	Total Alkalinity Bicarbonate	SM 2320B
	Alkalinity	SM 2320B
	Total Dissolved Solids	SM 2540C

TW: Sampled by Tucson Water

All wells to be sampled by pump purge and grab method except for PC-001 which will be sampled by hydrasleeve (descrete grab method)

All samples to be analyzed for pH, conductivity, turbidity, and dissolved oxygen in the field.

All metals are total

Kinder Morgan list is sampled quarterly and costs are paid for by Kinder Morgan except wells noted

