

**TABLE V.G.4. - LANDFILL LEACHATE COLLECTION SYSTEM**

Landfill	Primary Leachate Collection System					Secondary Leachate Collection System				
	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material	Drainage Media	Collection Pipes (including risers)	Filter Fabric	Geofabric	Sump Material
Federal Waste Facility Landfill	On floor: geocomposite with geonet minimum 8 oz geotextile filter fabric; on sidewalls: geocomposite drainage media (geonet and 6 oz geotextile both sides	6" HDPE lateral pipes, DR 9; 8" HDPE collector pipes, DR 9; 24" HDPE sump collection pipe, DR 9; 20" HDPE sidewall riser, DR 9	Minimum 8 oz on floor; 6 oz geotextile on sidewall	Geocomposite	2 layers 60 mil HDPE with gravel and 16 oz geotextile	Geonet on floor; geocomposite drainage media on sidewalls (geonet and 6 oz geotextile both sides)	6" HDPE collector pipes, DR 7; 8" HDPE sidewall riser DR 9	—	Geocomposite/geonet	60-mil HDPE with gravel, 16 oz geotextile and geonet

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-1B	FWF-1C	FWF-2B	FWF-2C	FWF-2D	FWF-3B
Hydrogeologic Unit Monitored	125	225	125	225	225	125
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	Observ	POC	POC	Observ
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3474.80	3474.68	Proposed	Proposed	Proposed	Proposed
Grade or Surface Elevation (ft, MSL)	3471.6	3471.5	Proposed	Proposed	Proposed	Proposed
Well Depth (ft below TOC)	107.9	259.0	Proposed	Proposed	Proposed	Proposed
Screen Interval, From(ft) To(ft)	3377.7 3367.7	to 3226.3 to 3216.3	Proposed	Proposed	Proposed	Proposed
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	Proposed	Proposed	Proposed	Proposed
Northing (ft)	6874426.4962	6874421.0693	Proposed	Proposed	Proposed	Proposed
Easting (ft)	562063.4720	562075.3983	Proposed	Proposed	Proposed	Proposed



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-3C	FWF-3D	FWF-4B	FWF-4C	FWF-4D	FWF-5B
Hydrogeologic Unit Monitored	225	225	125	225	225	125
Type- point of compliance (POC), background (BG), observation (Observ)	POC	POC	Observ	POC	POC	Observ
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Grade or Surface Elevation (ft, MSL)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Well Depth (ft below TOC )	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Screen Interval, From(ft) To(ft)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Facility Coordinates (e.g., lat/long or company coordinates)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Northing (ft)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Easting (ft)	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-5C	FWF-5D	FWF-6B	FWF-6C	FWF-7B	FWF-7C
Hydrogeologic Unit Monitored	225	225	125	225	125	225
Type- point of compliance (POC), background (BG), observation (Observ)	POC	POC	Observ	POC	Observ	POC
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	Proposed	Proposed	3473.15	3473.12	Proposed	Proposed
Grade or Surface Elevation (ft, MSL)	Proposed	Proposed	3470.3	3470.2	Proposed	Proposed
Well Depth (ft below TOC)	Proposed	Proposed	123.1	254.0	Proposed	Proposed
Screen Interval, From(ft) To(ft)	Proposed	Proposed	3365.8 3350.8	to 3234.8 3219.8	Proposed	Proposed
Facility Coordinates (e.g., lat/long or company coordinates)	Proposed	Proposed	State Plane	State Plane	Proposed	Proposed
Northing (ft)	Proposed	Proposed	6874108.1808	6874100.5948	Proposed	Proposed
Easting (ft)	Proposed	Proposed	562754.5267	562773.1359	Proposed	Proposed



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-7D	FWF-8B	FWF-8C	FWF-8D	FWF-9B	FWF-9C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type- point of compliance (POC), background (BG), observation (Observ)	POC	Observ	POC	POC	Observ	POC
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	Proposed	Proposed	Proposed	Proposed	3472.48	3472.19
Grade or Surface Elevation (ft, MSL)	Proposed	Proposed	Proposed	Proposed	3469.3	3468.9
Well Depth (ft below TOC )	Proposed	Proposed	Proposed	Proposed	118.7	243.1
Screen Interval, From(ft) To(ft)	Proposed	Proposed	Proposed	Proposed	3369.3 3354.3	to 3244.7 to 3229.7
Facility Coordinates (e.g., lat/long or company coordinates)	Proposed	Proposed	Proposed	Proposed	State Plane	State Plane
Northing (ft)	Proposed	Proposed	Proposed	Proposed	6873916.564	6873908.6212
Easting (ft)	Proposed	Proposed	Proposed	Proposed	563176.3943	563191.8078

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-9D	FWF-10B	FWF-10C	FWF-10D	FWF-11B	FWF-11C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type- point of compliance (POC), background (BG), observation (Observ)	POC	Observ	POC	POC	Observ	POC
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3471.96	3472.83	3472.56	3473.31	3472.06	3471.98
Grade or Surface Elevation (ft, MSL)	3468.8	3468.7	3468.9	3468.9	3468.9	3468.9
Well Depth (ft below TOC )	256.9	118.6	235.7	248.0	125.3	245.3
Screen Interval, From(ft) To(ft)	3230.6 to 3215.6	3368.9 to 3354.9	3243.3 to 3228.3	3231.0 to 3216.0	3362.3 to 3347.3	3242.3 to 3227.3
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873899.8854	6873845.1471	6873838.6796	6873835.1300	6873789.3491	6873781.0514
Easting (ft)	563210.6151	563337.2007	563347.0986	563357.3367	563451.9747	563471.2334



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-11D	FWF-12B	FWF-12C	FWF-12D	FWF-13B	FWF-13C
Hydrogeologic Unit Monitored	225	125	225	225	125	225
Type- point of compliance (POC), background (BG), observation (Observ)	POC	Observ	POC	POC	Observ	POC
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	DG	DG	DG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3472.37	3472.39	3472.34	3472.49	3472.17	3472.53
Grade or Surface Elevation (ft, MSL)	3468.7	3469.0	3468.9	3469.0	3469.0	3469.1
Well Depth (ft below TOC )	257.0	133.8	261.3	276.8	132.3	257.6
Screen Interval, From(ft) To(ft)	3230.9 to 3215.9	3354.3 to 3339.3	3226.6 to 3211.6	3211.3 to 3196.3	3355.4 to 3340.4	3230.5 to 3215.5
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873773.1459	6873725.9743	6873719.3197	6873709.9968	6873662.4105	6873654.1728
Easting (ft)	563489.9446	563589.1720	563606.6668	563624.9147	563728.5828	563747.1123

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-13D	FWF-14B	FWF-14C	FWF-15B	FWF-15C	FWF-15D
Hydrogeologic Unit Monitored	225	125	225	125	225	225
Type- point of compliance (POC), background (BG), observation (Observ)	POC	Observ	POC	Observ	POC	POC
Up, Down or Side Gradient (UG, DG, SG)	DG	DG	DG	SG	SG	SG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3472.77	3473.52	3472.95	3472.68	3472.88	3473.14
Grade or Surface Elevation (ft, MSL)	3469.0	3469.2	3469.2	3469.5	3469.6	3469.8
Well Depth (ft below TOC )	273.2	132.9	256.8	125.3	252.9	264.6
Screen Interval, From(ft) To(ft)	3214.9 3199.9	to 3356.2 to 3341.2	to 3223.2 to 3208.2	to 3363.0 to 3348.0	to 3235.6 to 3220.6	to 3224.2 to 3209.2
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873645.5630	6873592.1622	6873583.4828	6873641.6440	6873659.7358	6873675.4130
Easting (ft)	563765.7717	563882.8324	563901.5211	563972.0967	563980.5736	563988.0318



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-16B	FWF-16C	FWF-16D	FWF-17B	FWF-17C	FWF-17D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	POC	Observ	POC	POC
Up, Down or Side Gradient (UG, DG, SG)	SG	SG	SG	SG	SG	SG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3478.31	3478.43	3478.53	3477.54	3477.93	3478.23
Grade or Surface Elevation (ft, MSL)	3473.1	3473.3	3473.3	3477.8	3478.1	3478.5
Well Depth (ft below TOC )	135.7	257.6	270.5	144.0	260.5	279.0
Screen Interval, From(ft) To(ft)	3357.9 to 3342.9	3236.7 to 3221.7	3223.1 to 3208.1	3349.2 to 3334.2	3232.6 to 3217.6	3214.9 to 3199.9
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6873968.0899	6873982.1988	6873993.1844	6874375.8800	6874389.5101	6874403.3939
Easting (ft)	564124.4657	564130.7703	564135.781	564311.8932	564318.3038	564324.0419

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-18B	FWF-18C	FWF-18D	FWF-21B	FWF-21C	FWF-21D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	POC	Observ	POC	POC
Up, Down or Side Gradient (UG, DG, SG)	UG	UG	UG	UG	UG	UG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3483.60	3483.71	3483.87	3485.72	3485.98	3485.61
Grade or Surface Elevation (ft, MSL)	3480.5	3480.5	3480.7	3484.9	3485.1	3485.2
Well Depth (ft below TOC )	146.9	270.5	283.0	145.8	268.3	291.4
Screen Interval, From(ft) To(ft)	3352.4 3337.4	to 3228.8 3213.8	to 3216.5 3201.5	to 3354.2 3339.2	to 3232.0 3217.0	to 3208.8 to 3193.8
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6874687.3158	6874690.9928	6874698.5186	6875308.416	6875613.2443	6875318.3481
Easting (ft)	564496.8229	564486.1791	564468.4068	563818.8526	563806.7260	563796.0980



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-22B	FWF-22C	FWF-22D	FWF-23B	FWF-23C	FWF-23D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	POC	Observ	POC	POC
Up, Down or Side Gradient (UG, DG, SG)	UG	UG	UG	UG	UG	UG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3487.06	3486.96	3487.07	3486.61	3486.49	3486.39
Grade or Surface Elevation (ft, MSL)	3486.7	3486.9	3486.8	3486.4	3486.3	3486.3
Well Depth (ft below TOC )	149.3	269.2	285.7	144.3	266.9	275.7
Screen Interval, From(ft) To(ft)	3353.3 3338.3	to 3233.4 3218.4	to 3217.0 3202.0	to 3357.9 3342.9	to 3234.7 3219.7	to 3222.4 3207.4
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6875541.2897	6875547.6513	6875558.8005	6875592.3248	6875598.8774	6875605.2059
Easting (ft)	563434.5242	563420.8339	563396.9949	563159.2874	563146.0768	563132.7551

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-25B	FWF-25C	FWF-25D	FWF-26B	FWF-26C	FWF-26D
Hydrogeologic Unit Monitored	125	225	225	125	225	225
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	POC	Observ	POC	POC
Up, Down or Side Gradient (UG, DG, SG)	SG	SG	SG	SG	SG	SG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3486.29	3486.10	3485.58	3482.41	3482.31	3482.26
Grade or Surface Elevation (ft, MSL)	3482.9	3482.7	3482.5	3479.3	3479.3	3479.2
Well Depth (ft below TOC )	145.9	261.0	275.5	146.7	266.3	275.1
Screen Interval, From(ft) To(ft)	3356.1 to 3341.1	3240.8 to 3225.8	3225.8 to 3210.8	3351.3 to 3336.3	3226.6 to 3216.6	3217.7 to 3207.7
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane	State Plane	State Plane	State Plane
Northing (ft)	6875649.4520	6875632.5970	6875614.4840	6875269.6558	6875257.3582	6875245.6837
Easting (ft)	562539.4730	562531.1820	562523.1650	562368.1321	562362.8945	562358.2246



TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-27B	FWF-27C	FWF-28B	FWF-28C	FWF-28D	FWF-119B
Hydrogeologic Unit Monitored	125	225	125	225	225	125
Type- point of compliance (POC), background (BG), observation (Observ)	Observ	POC	Observ	POC	POC	Observ
Up, Down or Side Gradient (UG, DG, SG)	SG	SG	SG	SG	SG	UG
Casing Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Diameter and Material	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC	2" PVC
Screen Slot Size (in.)	0.010"	0.010"	0.010"	0.010"	0.010"	0.010"
Top of Casing Elevation (ft, MSL)	3479.09	3478.99	Proposed	Proposed	Proposed	3481.03
Grade or Surface Elevation (ft, MSL)	3474.6	3474.2	Proposed	Proposed	Proposed	3481.1
Well Depth (ft below TOC)	125.6	270.9	Proposed	Proposed	Proposed	142.4
Screen Interval, From(ft) To(ft)	3370.2 to 3355.2	3224.7 to 3209.7	Proposed	Proposed	Proposed	3354.1 to 3339.1
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	Proposed	Proposed	Proposed	State Plane
Northing (ft)	6874873.4286	6874852.8919	Proposed	Proposed	Proposed	6874825.7239
Easting (ft)	562184.3360	562177.3215	Proposed	Proposed	Proposed	564041.4846

TABLE VI.B.3.b  
UNIT GROUNDWATER DETECTION MONITORING SYSTEM

Waste Management Unit/Area Name	Unit No. 3					
Well Number(s)	FWF-119C	FWF-119D	FWF-19A (TP-33)			
Hydrogeologic Unit Monitored	225	225	OAG			
Type- point of compliance (POC), background (BG), observation (Observ)	POC	POC	Observ			
Up, Down or Side Gradient (UG, DG, SG)	UG	UG	UG			
Casing Diameter and Material	2" PVC	2" PVC	2" PVC			
Screen Diameter and Material	2" PVC	2" PVC	2" PVC			
Screen Slot Size (in.)	0.010"	0.010"	0.010"			
Top of Casing Elevation (ft, MSL)	3480.96	3481.11	3486.28			
Grade or Surface Elevation (ft, MSL)	3481.2	3481.3	3483.5			
Well Depth (ft below TOC)	273.1	284.5	55.2			
Screen Interval, From(ft) To(ft)	3223.6 to 3208.6	3211.5 to 3196.5	3441.8 to 3431.8			
Facility Coordinates (e.g., lat/long or company coordinates)	State Plane	State Plane	State Plane			
Northing (ft)	6874841.7440	6874858.6563	6874937.3974			
Easting (ft)	564030.5397	564018.2856	564545.6547			



**TABLE VI.B.3.C. - GROUNDWATER SAMPLE ANALYSIS**

For each well or group of wells, specify the suite of parameters for which groundwater samples will be analyzed.

Well No(s). FWF-1 (B & C), FWF-2 (B, C & D), FWF-3 (B, C & D), FWF-4 (B, C & D), FWF-5 (B, C & D), FWF-6 (B & C), FWF-7 (B, C & D), FWF-8 (B, C & D), FWF-9 (B, C & D), FWF-10 (B, C & D), FWF-11 (B, C & D), FWF-12 (B, C & D), FWF-13 (B, C & D), FWF-14 (B & C), FWF-15 (B, C & D), FWF-16 (B, C & D), FWF-17 (B, C & D), FWF-18 (B, C, & D), FWF-21 (B, C & D), FWF-22 (B, C & D), FWF-23 (B, C & D), FWF-25 (B, C & D), FWF-26 (B, C & D), FWF-27 (B & C), FWF-28 (B, C & D), FWF-119 (B, C & D), FWF-19A

<i>Parameter</i>	<i>Sampling Frequency</i>	<i>Analytical Method</i>	<i>Detection Limits</i>	<i>Concentration Limits<sup>1</sup></i>
<b>Volatile Organic Monitoring Parameters</b>				
Acetone	Staggered Semi-Annual	SW-846 8260/EPA Method 624	100 µg/L	100 µg/L
Benzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Bromoform	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Carbon Disulfide	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Carbon Tetrachloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Chlorobenzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Chlorodibromomethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Chloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	10 µg/L	10 µg/L
Chloroform	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Dichlorobromomethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
1,1-Dichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
1,2-Dichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
1,1-Dichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L

<sup>1</sup>The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

**TABLE VI.B.3.c. - GROUNDWATER SAMPLE ANALYSIS**

<i>Parameter</i>	<i>Sampling Frequency</i>	<i>Analytical Method</i>	<i>Detection Limits</i>	<i>Concentration Limits<sup>1</sup></i>
<b>Volatile Organic Monitoring Parameters (concluded)</b>				
1,2-Dichloropropane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
cis-1,3_Dichloropropylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
trans-1,3_Dichloropropylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Ethylbenzene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Methyl Bromide	Staggered Semi-Annual	SW-846 8260/EPA Method 624	10 µg/L	10 µg/L
Methyl Chloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	10 µg/L	10 µg/L
1,1,2,2-Tetrachloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Tetrachloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Toluene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
1,2-trans-Dichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	10 µg/L	5 µg/L
1,1,1-Trichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
1,1,2-Trichloroethane	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Trichloroethylene	Staggered Semi-Annual	SW-846 8260/EPA Method 624	5 µg/L	5 µg/L
Vinyl Chloride	Staggered Semi-Annual	SW-846 8260/EPA Method 624	10 µg/L	10 µg/L

<sup>1</sup> The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.

**TABLE VI.B.3.C. - GROUNDWATER SAMPLE ANALYSIS**

<i>Parameter</i>	<i>Sampling Frequency</i>	<i>Analytical Method</i>	<i>Detection Limits</i>	<i>Concentration Limits</i>
<b>Semi-Volatile Organic Monitoring Parameter</b>				
Phenol	Staggered Semi-Annual	SW-846 8270/EPA Method 625	10 µg/L	10 µg/L
1, 4 Dioxane	Staggered Semi-Annual	SW-846 8270/EPA Method 625	10 µg/L	10 µg/L
<b>Metal Monitoring Parameters</b>				
Arsenic	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.01 mg/L	NA
Nickel	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.005 mg/L	NA
Cadmium	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.005 mg/L	NA
Selenium	Staggered Semi-Annual	SW-846 6010/EPA Method 200.7	0.005 mg/L	NA

<sup>1</sup> The concentration limit is the basis for determining whether a release has occurred from the waste management unit/area.



**Table VII.E.1. - Permitted Unit Closure Cost Summary**

<b>Existing Unit Closure Cost Estimate</b>	
Unit	Cost
<b>RCRA FWF Unplanned Closure</b>	
Description	
Labor (including OH&P, Admin, and Oversight)	\$8,215,150
Material (including OH&P, Admin and Oversight)	\$16,273,862
Subcontract (including Admin and Oversight)	\$5,679,684
Equipment (including Admin and Oversight)	\$13,428,067
<b>SUBTOTAL</b>	<b>\$43,596,763</b>
Contingency	\$4,034,385
Escalation 2005 – 2007	\$2,091,985
<b>TOTAL ADDERS</b>	<b>\$6,126,369</b>
<b>Total Existing Unit Closure Cost Estimate (Unplanned Closure)</b>	<b>\$49,723,133 (2007) \$53,850,153 (2012)<sup>1</sup></b>
<b>Proposed Unit Closure Cost Estimate</b>	
Unit	Cost
FWF WWTP Total Closure (Unplanned)	\$833,988 (2012)
<b>Total Existing and Proposed Unit Closure Cost Estimate</b>	<b>\$54,684,141<sup>2</sup></b>

1. From TCEQ Annual Inflation Factors, for years 2007 – 2012, annual percentage increase is as follows: 2.2 (2008) + 1.2 (2009) + 1.0 (2010) + 2.1 (2011) + 1.8 (2012) = 8.3% increase.

<sup>1</sup>As units are added or deleted from these tables through future permit amendments or modifications, the remaining itemized unit costs should be updated for inflation when re-calculating the revised total cost in current dollars.

<sup>2</sup>Of the total Unit Closure Cost Estimate, \$4,734,858 (2013) is dedicated specifically for RCRA Closure, the remainder of the total Unit Closure Cost estimate is overlap between RCRA (HW-50397) and RML (RW4100) closure.



**TABLE VII.E.2. PERMITTED UNIT POST-CLOSURE COST SUMMARY**

(Source: Permit Application, Attachment VII.C, Revision 3, November 5, 2007)

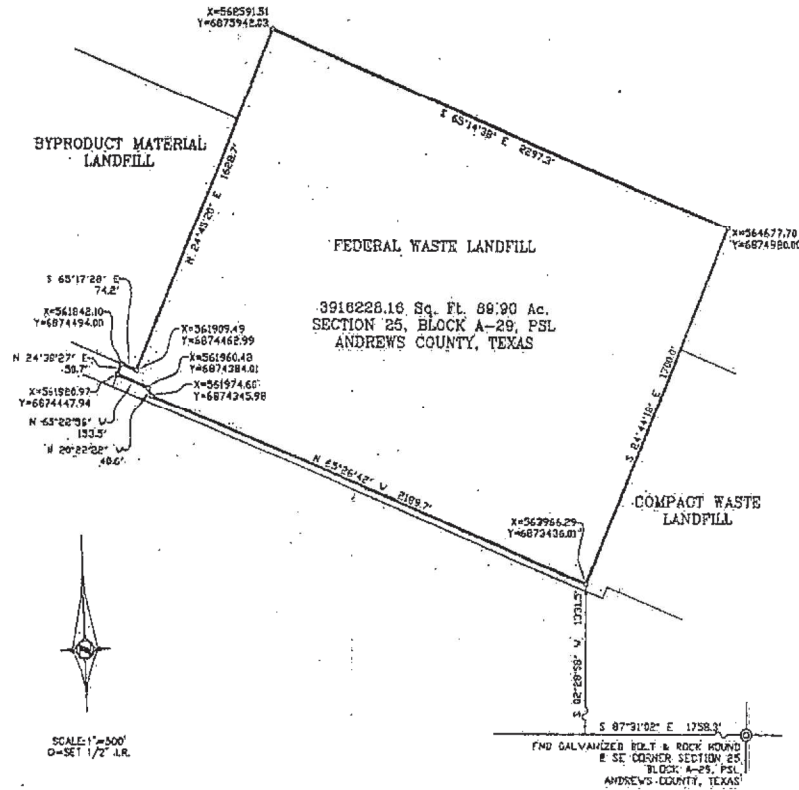
<b>Existing Unit Post-Closure Cost Estimate</b>	
<b>Unit</b>	<b>Cost</b>
No currently permitted units exist at the proposed facility.	
<b>TOTAL EXISTING UNIT POST-CLOSURE COST ESTIMATE</b>	<b>0</b>

<b>PROPOSED UNIT NOS. 1, 2 AND 3 POST-CLOSURE COST ESTIMATE</b>	
<b>Unit</b>	<b>Cost</b>
General Support	\$305,059
Walkover	\$26,294
Sample Collection & Preparation/Erosion Pins	\$171,371
Sample Analysis Interpretation	\$12,428
Sample Analysis at Off Site Lab	\$312,239
Leachate Monitoring, Pumping, Treatment	\$33,219
Meteorological Data Collection & Interpretation	\$21,109
Infiltration Data Collection & Interpretation	\$21,109
Annual Report Preparation	\$12,065
Conduct Land Survey	\$240,644
Survey Settlement Monitors	\$2,714
Maintenance	\$78,622
Regulatory Oversight	\$213,090
<b>SUBTOTAL</b>	<b>\$1,449,962</b>
<b>ADDERS</b>	
Contingency	\$144,996
Escalation 2005 – 2007	\$95,481
<b>TOTAL ADDERS</b>	<b>\$240,477</b>
<b>PROPOSED UNIT POST-CLOSURE ANNUAL COST ESTIMATE</b>	<b>\$1,690,439 per year</b>
<b>PROPOSED UNIT POST-CLOSURE TOTAL COST ESTIMATE</b>	<b>\$50,713,170 for 30 years</b>

TABLE VII.G - POST-CLOSURE PERIOD

Unit Name	Date Certified Closed	Permitted Post Closure Period (Yrs)	Date Post Closure Ends
Federal Waste Facility Landfill	To be Determined	30 years	To be Determined

# SITE LEGAL DESCRIPTION



## FIELD NOTE DESCRIPTION OF AN 89.90 ACRE TRACT OF LAND OUT OF SECTION 25, BLOCK A-29, PUBLIC SCHOOL LAND, ANDREWS COUNTY, TEXAS:

BEGINNING at a 1/4-inch iron rod set for the southeast corner of this tract, from which point a galvanized bolt and rock mound found for the Patented Southeast corner of Section 25, Block A-29, Public School Land, Andrews County, Texas, as filed of record in Volume 3, Page 272, Patent Records, Andrews County, Texas, bears S 02° 28' 58\"/>

THENCE N 65° 26' 42\"/>

Note: Coordinates are Texas State Plane NAD 83 Texas North Central Zone in US Survey Feet, with a Scale Factor of 0.99996852. Bearings are Grid and have a Theta Angle of -02° 29' 13\"/>

Dated: March 13, 2007

SS Job No. 80808  
Cook-Joyce, Inc.

By:

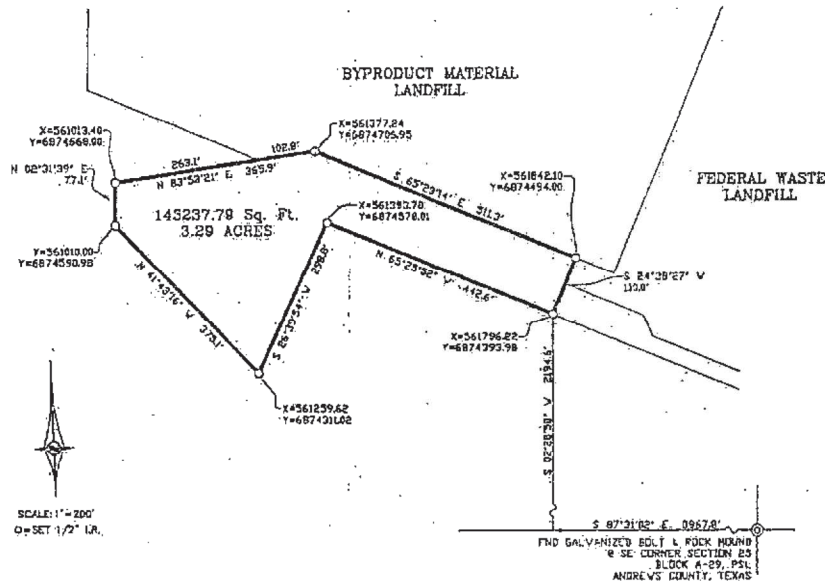
STARK SURVEYING, LLC  
*[Signature]*

Jimmie Robert Stark  
Registered Professional Land Surveyor





# SITE LEGAL DESCRIPTION (CONT')



## FIELD NOTE DESCRIPTION OF A 3.29 ACRE TRACT OF LAND OUT OF SECTION 25, BLOCK A-29, PUBLIC SCHOOL LAND, ANDREWS COUNTY, TEXAS:

BEGINNING at a 1/2-inch iron rod set for the southeast corner of this tract, from which point a galvanized-bolt and rock mound found for the Patented Southeast corner of Section 25, Block A-29, Public School Land, Andrews County, Texas, as filed of record in Volume 3, Page 272, Patent Records, Andrews County, Texas, bears S 02° 28' 58\" W, 2194.6 feet and S 87° 31' 02\" E, 3967.8 feet;

THENCE N 65° 25' 52\" W, 442.6 feet to a 1/2-inch iron rod set for a corner of this tract;

THENCE S 26° 39' 54\" W, 298.8 feet to a 1/2-inch iron rod set for a corner of this tract;

THENCE N 41° 43' 16\" W, 375.1 feet to a 1/2-inch iron rod set for the southwest corner of this tract;

THENCE N 02° 31' 39\" E, 77.1 feet to a 1/2-inch iron rod set for the northwest corner of this tract;

THENCE N 83° 53' 21\" E, 365.9 feet to a 1/2-inch iron rod set for a corner of this tract;

THENCE S 65° 23' 14\" E, 511.3 feet to a 1/2-inch iron rod set for the northeast corner of this tract;

THENCE S 24° 38' 27\" W, 110.0 feet to the place of beginning and containing 143237.79 square feet or 3.29 acres of land.

Note: Coordinates are Texas State Plane NAD 83 Texas North Central Zone in US Survey Feet, with a Scale Factor of 0.99996852, Bearings are Grid and have a Theta Angle of -02° 29' 13\".

Dated: March 13, 2007

STARK SURVEYING, LLC

SS Job No. 80808  
Cook-Joyce, Inc.

By:

*[Signature]*



Jimmie Robert Stark  
Registered Professional Land Surveyor



List of Incorporated Application Materials

The following is a list of Part A and Part B Industrial and Hazardous Waste Application elements which are incorporated into all Industrial and Hazardous Waste permits by reference as per Provision I.B.

TCEQ PART A Application Form

I. General Information

- I.B. - Authorized Agents
- I.C. - Identify entity who will conduct facility operation.
- I.D. - Facility Ownership

III. Wastes and Waste Management

- III.C.1. - Location of Waste Management Units - Topographic Map extending one mile beyond facility.

TCEQ PART B Application Form

I. General Information

- I.A. - Applicant
- I.C. - Facility Location - Address
- I.F. - Wastewater and Stormwater Disposition

II. Facility Siting Criteria

III. Facility Management

- III.B. - Personnel Training Plan
- III.C. - Security
- III.D. - Inspection Schedule
- III.E. - Contingency Plan
  - III.E.1. - Arrangements with Local Authorities
  - III.E.2. - Emergency Coordinators List
  - III.E.3. - Emergency Equipment list

IV. Wastes and Waste Analysis

- IV.B. - Table IV.B. - Waste Managed in Permitted Units
- IV.C. - Table IV.C. - Sampling and Analytical Methods
- IV.D. - Waste Analysis Plan

V. - Engineering Reports

- V.A.1. - General Information
- V.B. - Container Storage area engineering reports includes Table V.B. Container Storage Area Summary
  - V.B.1. - Containment System
- V.G. - Landfill Engineering Report
  - V.G.1. - Table V.G.1. Landfills
  - V.G.2. - Describe the Landfill
  - V.G.3. - Containment System - Leachate collection and liner systems.
  - V.G.4. - Landfill MTR Plans and Specifications showing Conformity with 31 TAC§335.173
  - V.G.5. - Site Development Plan - Methods used to deposit waste in landfill



- V.G.6. - Landfill Run-on Control
- V.G.7. - Landfill Run-off Control
- V.G.8. - Wind Dispersal
- V.G.9. - Liquid Waste Stabilization

VI. Geology Report

- VI.B.3. - Description of Current & Proposed Detection Monitoring System
- VI.B.3.a. - Complete Table VI.B.3.a. - Unit Ground-Water Monitoring System
- VI.B.3.b. - Complete Table VI.B.3.b. - Ground-Water Sample Analysis
- VI.B.3.c. - Proposed Detection Monitoring System
- VI.B.3.d. - Drawings Depicting current and proposed monitoring well design.
- VI.B.3.e. - Maps Showing:
  - 1) Monitor well locations
  - 2) Waste Management Area
  - 3) Property Boundary
  - 4) Point of Compliance
  - 5) Direction of Ground-Water Flow
- VI.B.3.f. - Proposed list of waste specific indicator parameters (Approved list should be included in permit)
- VI.B.3.g. - Describe proposed ground water-monitoring system
- VI.B.3.h. - Background Values
- VI.B.3.i. - Statistical Comparison Procedures to evaluate ground-water monitoring data
- VI.B.3.j. - Specify statistical method and process for determining whether constituent concentrations exceed background.

VII. - Closure and Post-Closure Care Plans

- VII.A. - Closure-complete Table VII.A. - Unit Closure Provide surface impoundment (non-liner) closure (if applicable) plans-other closure plans as applicable.
- VII.C.1. - Post-Closure Care Plan
- VII.C.2. - Facility contact during Post-Closure Period
- VII.E. - Table VII.E. Closure/Post Closure Cost Estimate

VIII. Financial Assurance

- VIII.A.3. - Liability Requirements
- VIII.B.1. - Applicant Financial Disclosure Statements
- VIII.C.3. - New Commercial Hazardous Waste Management Facilities - emergency response assurance

IX. - Releases from Solid Waste Units & Corrective Action (Not applicable)

X. Air Emission Standards

- X.A. - Process Vents and Equipment Leaks
- X.B - Office of Air Quality Addendum

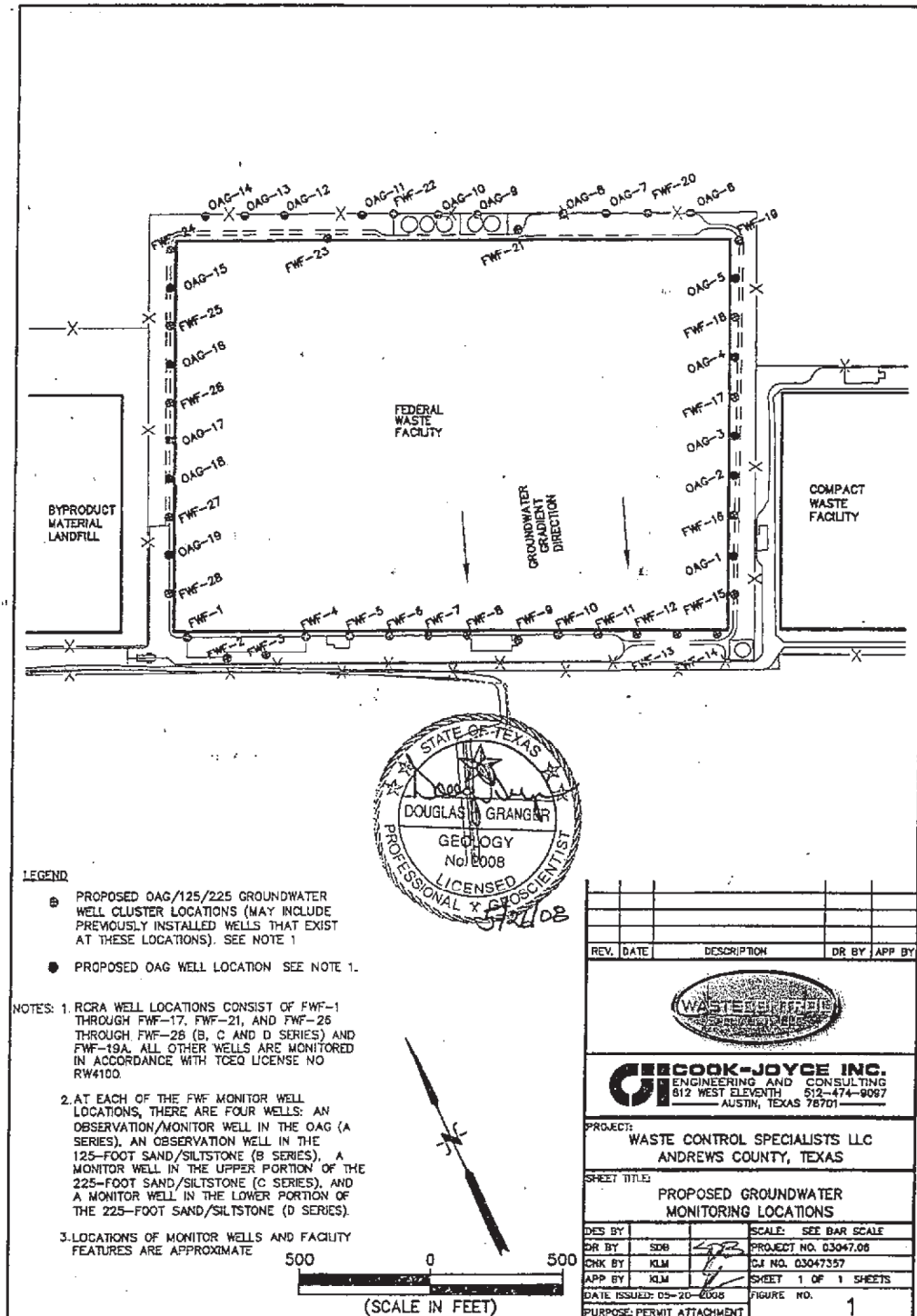
XII. Confidential Materials

Permit No. 50397  
Attachment D  
Sheet 1 of 1

Authorized Facility Units

TCEQ Permit Unit No.	Unit Name	Unit Description	Capacity
1	Federal Waste Facility Container Staging Building	60' x 120' building for storage of containerized waste	22,140 cubic feet
2	Federal Waste Facility Bulk Waste Staging Building	60' x 450' building for storage of bulk and containerized waste	35,110 cubic feet
3	Federal Waste Facility Landfill	Landfill comprised of two separate landfill units: non-canister disposal unit and canister disposal unit	4.9 million cubic yards

# MAP OF GROUNDWATER MONITORING WELLS





### **Attachment F - Well Design and Construction Specifications**

1. The Permittee shall use well drilling methods that minimize potential adverse effects on the quality of water samples withdrawn from the well, and that minimize or eliminate the introduction of foreign fluids into the borehole.
2. All wells constructed to meet the terms of this Permit shall be constructed such that the wells can be routinely sampled with a pump, bailer, or alternate sampling device. Piping associated with recovery wells should be fitted with sample ports or an acceptable alternative sampling method to facilitate sampling of the recovered ground water on a well by well basis.
3. Above the saturated zone the well casing may be two (2)-inch diameter or larger schedule 40 or 80 polyvinyl chloride (PVC) rigid pipe or stainless steel or polytetrafluoroethylene (PTFE or "teflon") or an approved alternate material. The PVC casing must be produced to National Sanitation Foundation standards for potable water applications and ASTM Standard F-480-02 (or most current revision), as applicable to casing for use in groundwater investigations. Solvent cementing compounds shall not be used to bond joints and all connections shall be flush-threaded or connected with stainless steel fasteners. In and below the saturated zone, the well casing shall be stainless steel or PTFE.
4. The Permittee shall replace any well that has deteriorated due to incompatibility of the casing material with the ground-water contaminants or due to any other factors. Replacement of the damaged well shall be completed within ninety (90) days of the date of the inspection that identified the deterioration.
5. Well casings and screens shall be pre-cleaned and prepackaged or cleaned prior to installation to remove residues that may be present in accordance with ASTM Standard F-480-02 (or most current revision). Well casings and screens made of fluorocarbon resins shall be cleaned by detergent washing.
6. For wells constructed after the date of issuance of this Permit, the screen length shall not exceed fifteen (15) feet within a given transmissive zone unless otherwise approved by the Executive Director. Screen lengths exceeding fifteen (15) feet may be installed in ground-water recovery or injection wells to optimize the ground-water remediation process in accordance with standard engineering practice.
7. The Permittee shall design and construct the intake portion of a well so as to allow water to flow into the well for sampling purposes and to minimize the passage of formation materials into the well during pumping. The intake portion of a well shall consist of commercially manufactured PVC, stainless steel or PTFE screen or approved alternate material. The annular space between the screen and the borehole shall be filled with clean siliceous granular material (i.e., filter pack) that has a proper size gradation to provide mechanical retention of the formation sand and silt. The well screen slot size shall be compatible with the filter pack size. The filter pack should extend no more than three (3) feet above the well screen. A silt trap, no greater than one (1) foot in length, may be added to the bottom of the well screen to collect any silt that may enter the well. The bottom of the well casing shall be capped with PVC, PTFE or stainless steel or approved alternate material.

Ground-water recovery and injection wells shall be designed in accordance with standard industry

practice to ensure adequate well production and to accommodate ancillary equipment. Silt traps exceeding one (1) foot may be utilized to accommodate ancillary equipment. Well heads shall be fitted with mechanical wellseals, or equivalent, to prevent entry of surface water or debris.

8. A minimum of two (2) feet of pellet or granular bentonite shall immediately overlie the filter pack in the annular space between the well casing and borehole. Where the saturated zone extends above the filter pack, pellet or granular bentonite shall be used to seal the annulus. The bentonite shall be allowed to settle and hydrate for a sufficient amount of time prior to placement of grout in the annular space. Above the minimum two (2)-foot thick bentonite seal, the annular space shall be sealed with a cement/bentonite grout mixture. The grout shall be placed in the annular space by means of a tremie pipe or pressure grouting methods equivalent to tremie grouting standards.

The cement/bentonite grout mixture or TCEQ approved alternative grout mixture shall fill the annular space to within two (2) feet of the surface. A suitable amount of time shall be allowed for settling to occur. The annular space shall be sealed with concrete, blending into a cement apron at the surface that extends at least two (2) feet from the outer edge of the monitor well borehole for above-ground completions. Alternative annular-space seal material may be proposed with justification and must be approved by the Executive Director prior to installation.

In cases where flush-to-ground completions are unavoidable, a protective structure such as a utility vault or meter box should be installed around the well casing and the concrete pad design should prevent infiltration of water into the vault. In addition, the Permittee must ensure that 1) the well/cap juncture is watertight; 2) the bond between the cement surface seal and the protective structure is watertight; and 3) the protective structure with a steel lid or manhole cover has a rubber seal or gasket.

9. Water added as a drilling fluid to a well shall contain no bacteriological or chemical constituents that could interfere with the formation or with the chemical constituents being monitored. For ground-water recovery and injection wells, drilling fluids containing freshwater and treatment agents may be utilized in accordance with standard industry practice to facilitate proper well installation. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent practicable during well development.
10. Upon completion of installation of a well, the well must be developed to remove any fluids used during well drilling and to remove fines from the formation to provide a particulate-free discharge to the extent achievable by accepted completion methods and by commercially available well screens. Development shall be accomplished by reversing flow direction, surging the well or by air lift procedures. No fluids other than formation water shall be added during development of a well unless the aquifer to be screened is a low-yielding water-bearing aquifer. In these cases, the water to be added should be chemically analyzed to evaluate its potential impact on in-situ water quality, and to assess the potential for formation damage.

For recovery and injection wells, well development methods may be utilized in accordance with standard industry practice to remove fines and maximize well efficiency and specific capacity. Addition of freshwater and treatment agents may be utilized during well development or re-development to remove drilling fluids, inorganic scale or bacterial slime. In these cases, the water and agents added should be chemically analyzed to evaluate their potential impact on in-situ water quality and to assess the potential for formation damage. All such additives shall be removed to the extent

practicable during well development.

11. Each well shall be secured and/or designed to maintain the integrity of the well borehole and ground water.
12. The Permittee shall protect the above-ground portion of the well by bumper guards and/or metal outer casing protection.
13. Copies of drilling and construction details demonstrating compliance with the items of this provision shall be kept on site. This record shall include the following information:
  - . name/number of well (well designation);
  - . intended use of the well(sampling, recovery, etc.);
  - . date/time of construction;
  - . drilling method and drilling fluid used;
  - . well location ( $\pm 0.5$  ft.);
  - . bore hole diameter and well casing diameter;
  - . well depth ( $\pm 0.1$  ft.);
  - . drilling and lithologic logs;
  - . depth to first saturated zone;
  - . casing materials;
  - . screen materials and design;
  - . casing and screen joint type;
  - . screen slot size/length;
  - . filter pack material/size;
  - . filter pack volume (how many bags, buckets, etc.);
  - . filter pack placement method;
  - . sealant materials;
  - . sealant volume (how many bags, buckets, etc.);
  - . sealant placement method;
  - . surface seal design/construction;
  - . well development procedure;
  - . type of protective well cap;
  - . ground surface elevation ( $\pm 0.01$  ft. MSL);
  - . top of casing elevation ( $\pm 0.01$  ft. MSL); and,
  - . detailed drawing of well (include dimensions).
14. The Permittee shall complete construction or abandonment and plugging of each well in accordance with the requirements of this Permit and 16 TAC 76.1000 through 76.1009 and shall certify such proper construction or abandonment within sixty (60) days of installation or abandonment. If the Permittee installs any additional or replacement wells, well completion logs for each well shall be submitted within sixty (60) days of well completion and development in accordance with 16 TAC Chapter 76. Certification of each well shall be submitted within sixty (60) days of installation for an individual well project or within sixty (60) days from the date of completion of a multiple well installation project. The certification shall be prepared by a qualified geologist or geotechnical engineer. Each well certification shall be accompanied by a certification report, including an accurate log of the soil boring, which thoroughly describes and depicts the location, elevations, material specifications, construction details, and soil conditions encountered in the boring for the well. A copy



of the certification and certification report shall be kept on-site, and a second copy shall be submitted to the Executive Director. Required certification shall be in the following form:

This is to certify that installation (or abandonment and plugging) of the following facility components authorized or required by TCEQ Permit No. \*\*\*\*\* has been completed, and that construction (or plugging) of said components has been performed in accordance with and in compliance with the design and construction specifications of Permit No. \*\*\*\*\*.” (Description of facility components with reference to applicable permit provisions).

15. The Permittee shall clearly mark and maintain the well number on each well at the site.
16. The Permittee shall measure and keep a record of the elevation of the top of each well casing in feet above mean sea level to the nearest 0.01 foot and permanently mark the measuring point on the well. The Permittee shall compare old and new elevations from previously surveyed wells and determine a frequency of surveying not to exceed five (5) year intervals.
17. Wells may be replaced at any time the Permittee or Executive Director determines that the well integrity or materials of construction or well placement no longer enable the well to yield samples representative of ground-water quality.
18. The Permittee shall plug soil test borings and wells removed from service after issuance of the Compliance Plan with a cement/bentonite grout mixture so as to prevent the preferential migration of fluids in the area of the borehole. Certification of each plugging shall be reported in accordance with Provision 14 of this attachment to this permit. The plugging of wells shall be in accordance with 16 TAC § 76.1000 through § 76.1009 dealing with Well Drilling, Completion, Capping and Plugging.
19. A well's screened interval shall be appropriately designed and installed to meet the well's specific objective (i.e., either DNAPL, LNAPL, both, or other objective of the well). All wells designed to detect, monitor, or recover DNAPL must be drilled to intercept the bottom confining layer of the aquifer. The screened interval to detect DNAPL should extend from the top of the lower confining layer to above the portion of the aquifer saturated with DNAPL. The screened interval for all wells designed to detect, monitor, or recover LNAPL must extend high enough into the vadose zone to provide for fluctuations in the seasonal water table. In addition, the sandpacks for the recovery or monitoring well's screened interval shall be coarser than surrounding media to ensure the movement of NAPL to the well.

# Texas Commission on Environmental Quality



Class 3 Permit Modification to

Hazardous Waste Permit No. 50397

Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

## Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units.) and the Application Elements listed in “Attachment C”, which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ).

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

Continuation Sheet 23 of 58

## Provision V.G.1. Landfills

1. The permittee may dispose of a total volume of 4,000,000 cubic yards of hazardous waste in one permitted landfill. The landfill cells shall meet the specifications listed in Table V.G.1. Landfills. The permittee is authorized to operate the permitted landfill for waste disposal subject to the limitations contained herein.

# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), July 22, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.



Class 1 Permit Modification  
Waste Control Specialists LLC  
Page 2

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.

Continuation Sheet 48 of 58

Provision VII.B.1. Financial Assurance for Closure

1. The permittee shall provide financial assurance for closure of all existing permitted units covered by this permit in an amount not less than \$49,723,133 (2007 dollars) as shown on Table VII.E.1. - Permitted Unit Closure Cost Summary. Financial assurance shall be secured and maintained in compliance with 30 TAC Chapter 37, Subchapter P; and 335.179. Financial assurance is subject to the following:
  - a. Adjustments to Financial Assurance Amount:

At least sixty (60) days prior to acceptance of waste in proposed permitted units listed in Table VII.E.1. - Permitted Unit Closure Cost Summary, the permittee shall provide the amount of financial assurance required for closure by the amounts listed in Table VII.E.1. and shall submit financial assurance documentation.
  - b. Annual Inflation Adjustments

Financial assurance for closure, including any adjustments after permit issuance, shall be corrected for inflation according to the methods described by 30 TAC Sections 37.131 and 37.141.

Table III.D. Inspection Schedule

Replace Table III.D. with revised Table III.D. (attached).

Table IV.B. Wastes Managed in Permitted Units

Replace Table IV.B. with revised Table IV.B. (attached).

Table IV.C. Sampling and Analytical Methods

Replace Table IV.C. with revised Table IV.C. (attached).

Table V.B. Container Storage Areas

Replace Table V.B. with revised Table IV.C. (attached).

Table V.G.1. Landfills

Replace Table V.G.1. with revised Table. V.G.1. (attached).

Table V.G.3. Landfill Liner System

Replace Table V.G.3. with revised Table. V.G.3. (attached).

Table V.G.4. Landfill Leachate Collection System

Replace Table V.G.4. with revised Table. V.G.4. (attached).

Table VI.B.3.b. Unit Groundwater Detection Monitoring System

Replace Table VI.B.3.b. with revised Table. VI.B.3.b. (attached).

Table VI.B.3.c. Groundwater Sample Analysis

Replace Table VI.B.3.c. with revised Table. VI.B.3.c. (attached).

Table VII.E.1. Permitted Unit Closure Cost Summary

Replace Table VII.E.1. with revised Table. VII.E.1. (attached).

This Class 3 modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: April 20, 2012

  
For the Commission



# Texas Commission on Environmental Quality



Class 1 Permit Modification

to

Hazardous Waste Permit No. 50397

Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

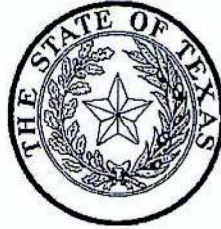
Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ).

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

# Texas Commission on Environmental Quality



Class 1<sup>st</sup> Permit Modification

to

Hazardous Waste Permit No. 50397

Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality (TCEQ).

This Class 1<sup>st</sup> Permit Modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: June 22, 2012

  
For the Commission



# Texas Commission on Environmental Quality



Class 1<sup>st</sup> Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

This Class 1<sup>st</sup> Permit Modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: August 29, 2012

  
For the Commission



# Texas Commission on Environmental Quality



Class 2 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

Table IV.B. Wastes Managed in Permitted Units

Replace Table IV.B. with revised Table IV.B. (attached).

Table IV.C. Sampling and Analytical Methods

Replace Table IV.C. with revised Table IV.C. (attached).

This Class 2 Permit Modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: November 30, 2012

  
For the Commission

# Texas Commission on Environmental Quality



Class 2 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>1</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>1</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

This Class 1 Permit Modification is part of Permit No. 50397 and should be attached thereto.

# Texas Commission on Environmental Quality



Class 2 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

Table IV.C. Sampling and Analytical Methods

Replace Table IV.C. with revised Table IV.C. (attached).

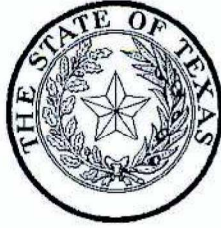
This Class 2 Permit Modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: January 18, 2013

  
For the Commission



# Texas Commission on Environmental Quality



Class 1 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Cover Sheet:

EPA I.D. Number is corrected to TXR000075788

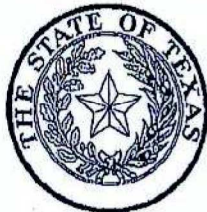
Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan); November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal); February 6, 2013 (Class 1 modification to revise the contingency plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

This Class 1 Permit Modification is part of Permit No. 50397 and should be attached thereto.

# Texas Commission on Environmental Quality



Class 1<sup>st</sup> Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan); November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal); February 6, 2013 (Class 1<sup>st</sup> modification to revise the contingency plan); April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

Issued Date: May 14, 2013

  
For the Commission



# Texas Commission on Environmental Quality



Class 1 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.



# Texas Commission on Environmental Quality



Class 2 Permit Modification  
to  
Hazardous Waste Permit No. 50397  
Waste Control Specialists LLC – Andrews County, Texas

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

Table III.E.3. Emergency Equipment

Replace Table III.E.3. with revised Table III.E.3. (attached).

This Class 2 Permit Modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: October 28, 2013

  
For the Commission



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### Provision I.B. Incorporated Application Materials

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the emergency response plan), November 20, 2013 (Class 1 modification to revise the contingency plan and Provision I.B) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.



# Texas Commission on Environmental Quality



## **Class 1<sup>1</sup> Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>1</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>1</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>1</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 1<sup>1</sup> modification to revise the Waste Acceptance Plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

Issue Date: March 31, 2014

  
For the Commission



# Texas Commission on Environmental Quality



## **Class 3 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>1</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>1</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>1</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 1<sup>1</sup> modification to revise the Waste Acceptance Plan) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.



Continuation Sheet 23 of 58

Revise Provision V.C. as follows:

V.C. Tanks and Tank Systems

1. The permitted tank units and their approved waste types are shown in Table V.C. - Tanks and Tank Systems. The permittee is authorized to operate the permitted tank units for storage and processing subject to the limitations contained herein.
2. The permittee shall not place hazardous waste or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)]
3. The permittee shall prevent spills and overflows from the tank or containment system as per the requirements of 40 CFR 264.194(b).
4. Secondary containment systems must be provided with a leak-detection system that is operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours.
5. The permittee shall report to the Executive Director within twenty-four (24) hours of detection when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste that is immediately contained and cleaned-up need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported.)
6. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the permittee shall report the following information to the Executive Director: [40 CFR 264.196(d)(3)]
  - a. Likely route of migration of the release;
  - b. Characteristics of the surrounding soil (including soil composition, geology, hydrology, and climate);
  - c. Results of any monitoring or sampling conducted in connection with the release. If the permittee finds it will be impossible to meet this time period, the permittee shall provide the Executive Director with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires;
  - d. Proximity of downgradient drinking water, surface water, and populated areas; and
  - e. Description of response actions taken or planned.
7. The permittee shall submit to the Executive Director all certifications of major repairs to correct leaks within seven (7) days of returning the tank system to use. [40 CFR 264.196(f)]



Continuation Sheet 48 of 58

Revise Provision VII.B. as follows:

**VII.B. Financial Assurance for Closure**

1. The permittee shall provide financial assurance for closure of all existing permitted units covered by this permit in an amount not less than \$54,684,141 (2012 dollars) as shown on Table VII.E.1. - Permitted Unit Closure Cost Summary. Financial assurance shall be secured and maintained in compliance with 30 TAC Chapter 37, Subchapter P; and 335.179. Financial assurance is subject to the following:

- a. Adjustments to Financial Assurance Amount:

At least sixty (60) days prior to acceptance of waste in proposed permitted units listed in Table VII.E.1. - Permitted Unit Closure Cost Summary, the permittee shall provide the amount of financial assurance required for closure by the amounts listed in Table VII.E.1. and shall submit financial assurance documentation.

- b. Annual Inflation Adjustments

Financial assurance for closure, including any adjustments after permit issuance, shall be corrected for inflation according to the methods described by 30 TAC Sections 37.131 and 37.141.

2. The permittee shall submit to the Executive Director, upon request, such information as may be required to determine the adequacy of the financial assurance.
3. The financial assurance for any closure or post-closure care activity required under this permit may be satisfied, in whole or in part, by the maintenance of financial assurance for that activity pursuant to the requirements of other permits and/or licenses issued by the TCEQ, upon demonstration of equivalency to the Executive Director by the Permittee. To demonstrate equivalency of financial assurance between this permit and any other permit or license, the permittee shall submit a written request for a permit modification or amendment to authorize a change in the approved financial assurance, in accordance with 30 TAC Section 305.69.

Continuation Sheet 49 of 58

Revise Provision VII.C. as follows:

**VII.C. Storage and Processing Unit Closure Requirements**

The permittee shall close the storage and processing units identified as TCEQ Permit Unit Nos. 1, 2 and 4 through 15 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (container storage), and the Texas Risk Reduction Program of 30 TAC Chapter 350.



Table III.D. Inspection Schedule

Replace Table III.D. with revised Table III.D. (attached).

Table V.C. Tanks and Tank Systems

Add Table V.C. (attached).

Table VI.B.3.b. Unit Groundwater Detection Monitoring System

Replace Table VI.B.3.b. with revised Table VI.B.3.b. (attached).

Table VII.E.1. Permitted Unit Closure Cost Summary

Replace Table VII.E.1. with revised Table VII.E.1. (attached).

Replace Attachment B with revised Attachment B (attached).

This Class 3 modification is part of Permit No. 50397 and should be attached thereto.

Issued Date: June 11, 2014

  
For the Commission

# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 1<sup>st</sup> modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.



Continuation Sheet 23 of 58

Revise Provision V.C. as follows:

V.C. Tanks and Tank Systems

1. The permitted tank units and their approved waste types are shown in Table V.C. - Tanks and Tank Systems. The permittee is authorized to operate the permitted tank units for storage and processing subject to the limitations contained herein.
2. The permittee shall not place hazardous waste or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)]
3. The permittee shall prevent spills and overflows from the tank or containment system as per the requirements of 40 CFR 264.194(b).
4. Secondary containment systems must be provided with a leak-detection system that is operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four (24) hours.
5. The permittee shall report to the Executive Director within twenty-four (24) hours of detection when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste that is immediately contained and cleaned-up need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported.)
6. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the permittee shall report the following information to the Executive Director: [40 CFR 264.196(d)(3)]
  - a. Likely route of migration of the release;
  - b. Characteristics of the surrounding soil (including soil composition, geology, hydrology, and climate);
  - c. Results of any monitoring or sampling conducted in connection with the release. If the permittee finds it will be impossible to meet this time period, the permittee shall provide the Executive Director with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires;
  - d. Proximity of downgradient drinking water, surface water, and populated areas; and
  - e. Description of response actions taken or planned.
7. The permittee shall submit to the Executive Director all certifications of major repairs to correct leaks within seven (7) days of returning the tank system to use. [40 CFR 264.196(f)]



Continuation Sheet 48 of 58

Revise Provision VII.B. as follows:

VII.B. Financial Assurance for Closure

1. The permittee shall provide financial assurance for closure of all existing permitted units covered by this permit in an amount not less than \$54,684,141 (2012 dollars) as shown on Table VII.E.1. - Permitted Unit Closure Cost Summary. Financial assurance shall be secured and maintained in compliance with 30 TAC Chapter 37, Subchapter P; and 335.179. Financial assurance is subject to the following:

- a. Adjustments to Financial Assurance Amount:

At least sixty (60) days prior to acceptance of waste in proposed permitted units listed in Table VII.E.1. - Permitted Unit Closure Cost Summary, the permittee shall provide the amount of financial assurance required for closure by the amounts listed in Table VII.E.1. and shall submit financial assurance documentation.

- b. Annual Inflation Adjustments

Financial assurance for closure, including any adjustments after permit issuance, shall be corrected for inflation according to the methods described by 30 TAC Sections 37.131 and 37.141.

2. The permittee shall submit to the Executive Director, upon request, such information as may be required to determine the adequacy of the financial assurance.
3. The financial assurance for any closure or post-closure care activity required under this permit may be satisfied, in whole or in part, by the maintenance of financial assurance for that activity pursuant to the requirements of other permits and/or licenses issued by the TCEQ, upon demonstration of equivalency to the Executive Director by the Permittee. To demonstrate equivalency of financial assurance between this permit and any other permit or license, the permittee shall submit a written request for a permit modification or amendment to authorize a change in the approved financial assurance, in accordance with 30 TAC Section 305.69.

Continuation Sheet 49 of 58

Revise Provision VII.C. as follows:

VII.C. Storage and Processing Unit Closure Requirements

The permittee shall close the storage and processing units identified as TCEQ Permit Unit Nos. 1, 2 and 4 through 15 in accordance with the approved Closure Plans, 40 CFR Part 264, Subpart G, 40 CFR 264.178 (container storage), and the Texas Risk Reduction Program of 30 TAC Chapter 350.

Table III.D. Inspection Schedule

Replace Table III.D. with revised Table III.D. (attached).

Table V.C. Tanks and Tank Systems

Add Table V.C. (attached).

Table VI.B.3.b. Unit Groundwater Detection Monitoring System

Replace Table VI.B.3.b. with revised Table VI.B.3.b. (attached).

Table VII.E.1. Permitted Unit Closure Cost Summary

Replace Table VII.E.1. with revised Table VII.E.1. (attached).

Replace Attachment B with revised Attachment B (attached).

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 1<sup>st</sup> modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.



These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.

# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 1<sup>st</sup> modification to revise Section V., Engineering Report), August 1, 2012 (Class 1<sup>st</sup> modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 1<sup>st</sup> modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 1<sup>st</sup> modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), July 22, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.



Class 1 Permit Modification  
Waste Control Specialists LLC  
Page 2

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.

# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC – Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), July 22, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), January 27, 2016 (revise the Contingency Plan and Provision I.B. to change the Emergency Coordinators List and Alternate Emergency Coordinators List) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC - Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

Continuation Sheet 7 of 58

### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), July 22, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), January 27, 2016 (revise the Contingency Plan and Provision I.B. to change the Emergency Coordinators List and Alternate Emergency Coordinators List), May 10, 2016 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List and correct typographical errors) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.

These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.



# Texas Commission on Environmental Quality



## **Class 1 Permit Modification to Hazardous Waste Permit No. 50397 Waste Control Specialists LLC - Andrews County, Texas**

Permit No. 50397 is hereby modified as follows:

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### **Provision I.B. Incorporated Application Materials**

This permit is based on, and the permittee shall follow the Part A and Part B Industrial and Hazardous Waste Application submittals dated May 24, 2006, July 20, 2006, June 22, 2007, November 5, 2007, February 1, 2008 May 24, 2006, December 22, 2010, February 25, 2011 and September 30, 2011 (Class 3 modification to extend the construction schedule for one landfill and two (2) container storage areas (CSA) for more than six months (up to four years); relocate the two container storage areas; modify the landfill configuration and leachate collection system design; revise the Construction Quality Assurance Plan, the Waste Analysis Plan, and the Closure Plan; revise the number and location of groundwater monitoring wells; revise the groundwater sampling procedures; and to add an impermeable interior coating/lining compatible with waste to the container storage units), April 27, 2012 (Class 1 modification to revise Table III.E.2, Emergency Coordinators List), May 2, 2012 (Class 11 modification to revise Section V., Engineering Report), August 1, 2012 (Class 11 modification to revise the initial FA amount), September 6, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow macroencapsulation), September 13, 2012 and November 1, 2012 (Class 2 modification to revise the Waste Analysis Plan and Engineering Report to allow codisposal), November 1, 2012 (Class 1 modification to revise the name of the facility manager and contingency plan), February 6, 2013 (Class 1 modification to revise the contingency plan), April 11, 2013 (Class 11 modification to revise the Landfill Operations Plan, Waste Analysis Plan, and Waste Acceptance Plan), May 31, 2013 (Class 1 modification to revise the contingency plan and Provision I.B.), August 13, 2013 (Class 2 modification to revise the consolidated emergency response plan), August 16, 2013 (Class 3 modification to add the leachate and contact water storage tanks and wastewater treatment system tanks to the permit), November 20, 2013 (Class 1 modification to revise the emergency coordinator), January 14, 2014 (Class 11 modification to revise the Waste Acceptance Plan), June 10, 2014 (Class 1 modification to revise the contingency plan, revise Table VII.E.1., update Attachments E, F, and H and correct omissions), July 31, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), October 9, 2014 (Class 1 modification to revise the contingency plan and Provision I.B.), June 1, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), July 22, 2015 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List), January 27, 2016 (revise the Contingency Plan and Provision I.B. to change the Emergency Coordinators List and Alternate Emergency Coordinators List), May 10, 2016 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List and correct typographical errors), May 17, 2016 (revise the Contingency Plan and Provision I.B. to change the Alternate Emergency Coordinators List) and the Application Elements listed in "Attachment C", which are hereby approved subject to the terms of this permit and any other orders of the Texas Commission on Environmental Quality.



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Waste Control Specialists LLC  
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These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.

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Waste Control Specialists LLC  
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These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

This Class 1 modification is part of Permit No. 50397 and should be attached thereto.