

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
GENERAL SERVICES DIVISION
OFFICE OF PROCUREMENT SERVICES
4200 SURFACE ROAD, COLUMBUS, OH 43228-1395

AMENDMENT FOR CHANGE
AMENDMENT NO. 1

TO: LIMITED DISTRIBUTION – OHIO DEPARTMENT OF COMMERCE
FROM: HUGH QUILL, DIRECTOR, DEPARTMENT OF ADMINISTRATIVE SERVICES
SUBJECT: TERM CONTRACT - UNDERGROUND STORAGE TANK ASSESSMENT AND CLEANUP

Attached are pages 44 through 72 to this contract. Remove these pages from the existing contract and replace with the attached pages on the effective and/or revision date.

This amendment is issued to add cost breakdowns to assist with verification of work plans and invoices. No additional funds are added.

All other prices, terms and conditions remain unchanged.

Questions regarding this Amendment and/or the Requirements Contract may be directed to:

Ross Leider, CPPB
ross.leider@das.state.oh.us

This Amendment, the main Requirements Contract and any additional amendments thereto are available from the DAS Web site at the following address:



<http://www.ohio.gov/procure>

Affected Contractor(s):

See Page 2

Affected Contractors

0000067145
Hull & Associates, Inc.
6397 Emerald Parkway
Suite 200
Dublin, OH 43016
dmustafag@hullinc.com

0000079442
ATC Associates, Inc.
10020 Brecksville Road
Brecksville, OH 44141
mark.samblanet@atcassociates.com

0000178401
Parsons Commercial Technology Group, Inc.
26301 Curtiss Wright Parkway
Cleveland, OH 44143
Andrew.Schrock@parsons.com

0000178390
Delta Consultants
2323 Lake Club Drive
Suite 105
Columbus, OH 43232
vmalone@deltaenv.com

0000064086
BJAAM Environmental, Inc.
472 Elm Ridge Avenue
Suite B
Canal Fulton, OH 44614
jgrecco@bjaam.com

0000055718
Spence Environmental Consulting, Inc.
P.O. Box 499
Brice, OH 43109
curt@spenceenv.com

0000068177
URS Corporation
1375 Euclid Avenue
Suite 600
Cleveland, OH 44115
martin_schmidt@urscorp.com

0000059356
SRW Environmental
55 West TechneCenter Blvd
Suite C
Milford, OH 45150
rhineham@srwenvironmental.com

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$780.00	
2	Ground Penetrating Radar	Site	\$2,170.00	Assumes survey and reporting
3	Concrete Coring	Boring	\$134.00	
4	Airknifing (per day)	Unit	\$1,975.00	
5	Airknifing (per half day)	Unit	\$1,210.00	
6	Hand clearance of borehole	Foot	\$144.00	
7	Asphalt Surface Patch	Well	\$42.00	
8	Concrete Surface Patch	Well	\$48.00	
9	Half Day Direct Push truck	Unit	\$1,220.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$2,320.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$1,648.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$2,320.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$309.00	
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$161.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$16.00	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$73.00	
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$72.00	
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$80.00	
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$332.00	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$78.00	
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$71.00	
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$67.00	
23	Rock Coring / Air Rotary	Foot	\$143.00	
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$347.00	
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$83.00	
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$74.00	
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$71.00	
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$50.00	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$53.00	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$50.00	

	Description	Unit	Cost	Assumptions
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$50.00	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$50.00	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$53.00	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$53.00	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$53.00	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$65.00	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$65.00	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$69.00	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$69.00	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$69.00	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$75.00	
Miscellaneous				
42	ARRA Signage & Installation	Site	\$2,000.00	
43	Well Development and Sampling Equipment & Supplies	Day	\$250.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
44	Slug Testing equipment and supplies	Day	\$330.00	
45	Free Product Recovery materials, equipment and supplies.	Event	\$100.00	
46	Drum (55 Gallon Steel)	Drum	\$50.00	
47	Manifest/Waste Disposal - Soil	Drum	\$144.00	
48	Manifest/Waste Disposal - Water	Drum	\$144.00	
49	Manifest/Waste Disposal - Product - Haz Disposal	Drum	\$144.00	
50	Portable lighting and generator	Day	\$190.00	
51	Surveying equipment	Day	\$140.00	
52	Site traffic control equipment	Day	\$25.00	
53	Work vehicle	Day	\$75.00	
54	Work Truck	Day	\$75.00	
Laboratory				
55	Fraction Organic Carbon	Each	\$64.00	
56	Total Lead	Each	\$13.00	
57	Total Dissolved Solids	Each	\$16.00	
58	Total Suspended Solids	Each	\$16.00	
59	Ignitibility/Flash	Each	\$54.00	
60	Paint Filter Test	Each	\$16.00	
61	pH	Each	\$11.00	
62	TCLP Lead	Each	\$80.00	
63	TCLP Volatiles	Each	\$187.00	
64	TCLP Semivolatiles	Each	\$214.00	

	Description	Unit	Cost	Assumptions
65	RCRA Metals	Each	\$66.00	
66	Atterberg Limits	Each	\$45.00	
67	Density Test	Each	\$80.00	
68	EXTRUDE Tube	Each	\$35.00	
69	Grain Size with Hydrometer	Each	\$95.00	
70	Porosity	Each	\$120.00	
71	Specific Gravity	Each	\$40.00	
72	Vertical Permeability	Each	\$220.00	
73	Moisture Content	Each	\$10.00	
74	USCS Classification	Each	\$150.00	
75	Dry Bulk density	Each	\$80.00	
76	Mobile Laboratory (Day)	Unit	\$2,390.00	
77	Mobile Laboratory (Half Day)	Unit	NA	
78	Sample shipping	Cooler	\$100.00	
Reporting				
79	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$50.00	
80	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$50.00	
81	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$50.00	
All costs listed above include vendor's overhead and profit mark-up.				

Region 1 - Hull & Associates – **Hull Assumptions**

	Description			Hull Assumptions
Drilling				
1	Site Utility Clearance			Note: on-site traffic control included in drilling units.
2	Ground Penetrating Radar			For on-site utility locating activities. This is not simply for an OUPS call.
3	Concrete Coring			
4	Airknifing (per day)			
5	Airknifing (per half day)			Includes advancing through asphalt, backfilling borings with soil cuttings.
6	Hand clearance of borehole			Includes advancing through asphalt, backfilling borings with soil cuttings.
7	Asphalt Surface Patch			
8	Concrete Surface Patch			For patching boreholes not completed as monitoring wells
9	Half Day Direct Push truck			For patching boreholes not completed as monitoring wells
10	Full Day Direct Push truck			
11	Half Day Direct Push truck			
12	Full Day Direct Push truck			
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)			
14	Pre-pack wells - 1 inch - screen - 5 foot section			Units 13, 14, and 15 are to be used to construct a 1.0" diameter well in a direct-push boring in conjunction with Direct Push day or half day units.
15	1.0" PVC Riser and Holeplug seal (per foot)			
16	Soil Borings by Hollow Stem Auger - (0-30')			
17	Soil Borings by Hollow Stem Auger - (30.25-60')			Includes borehole abandonment using hole plug.
18	Soil Borings by Hollow Stem Auger - (>60.25')			Includes borehole abandonment using hole plug.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)			Includes borehole abandonment using hole plug.
20	2" GW MW's by Hollow Stem Auger - (0-30')			Units 19 through 22 are used to drill and install a 2.0" MW using HSA.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')			Excludes costs covered by unit 19
22	2" GW MW's by Hollow Stem Auger - (>60.25')			Excludes costs covered by unit 19
23	Rock Coring / Air Rotary			Combine with unit 20 and unit 19 to drill through soil to bedrock with augers, switch to air rotary and drill to completion depth in bedrock and install 2.0" diameter monitoring well. Unit 20 is for portion of drilling in unconsolidated material, this unit (23) is for portion of drilling in bedrock.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)			Units 24 through 27 are used to drill and install a 2.0" MW using HSA.

Region 1 - Hull & Associates – **Hull Assumptions**

	Description			Hull Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')			Excludes costs covered by unit 24
26	4" GW MW's by Hollow Stem Auger - (30.25-60')			Excludes costs covered by unit 24
27	4" GW MW's by Hollow Stem Auger - (>60.25')			Excludes costs covered by unit 24
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')			
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')			
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')			
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')			
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')			
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')			
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')			Includes standard monitoring well flushmount manway and pad removal and patching
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')			
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')			
Miscellaneous				
42	ARRA Signage & Installation			
43	Well Development and Sampling Equipment & Supplies			Excludes drums and traffic control, which are covered in units 46 and 52, respectively.
44	Slug Testing equipment and supplies			Excludes drums and traffic control, which are covered in units 46 and 52, respectively.
45	Free Product Recovery materials, equipment and supplies.			Excludes drums and traffic control, which are covered in units 46 and 52, respectively.
46	Drum (55 Gallon Steel)			Excludes drums and traffic control, which are covered in units 46 and 52, respectively.
47	Manifest/Waste Disposal - Soil			
48	Manifest/Waste Disposal - Water			
49	Manifest/Waste Disposal - Product - Haz Disposal			

Region 1 - Hull & Associates – **Hull Assumptions**

	Description			Hull Assumptions
50	Portable lighting and generator			
51	Surveying equipment			
52	Site traffic control equipment			Use only for onsite traffic control not associated with drilling units (e.g., well development, groundwater sampling, LNAPL recovery).
53	Work vehicle			Consultant vehicle only
54	Work Truck			Consultant truck only
Laboratory				
55	Fraction Organic Carbon			
56	Total Lead			
57	Total Dissolved Solids			
58	Total Suspended Solids			
59	Ignitibility/Flash			
60	Paint Filter Test			
61	pH			
62	TCLP Lead			
63	TCLP Volatiles			
64	TCLP Semivolatiles			
65	RCRA Metals			
66	Atterberg Limits			
67	Density Test			
68	EXTRUDE Tube			
69	Grain Size with Hydrometer			
70	Porosity			
71	Specific Gravity			
72	Vertical Permeability			
73	Moisture Content			
74	USCS Classification			
75	Dry Bulk density			
76	Mobile Laboratory (Day)			
77	Mobile Laboratory (Half Day)			
78	Sample shipping			
Reporting				
79	Tier 1 report supplies, materials, shipping, and incidentals			
80	Tier 2 report supplies, materials, shipping, and incidentals			
81	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals			
All costs listed above include vendor's overhead and profit mark-up.				

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$594.00	Assume 2 hours on site with sewer cameras, gpr and related equipment
2	Ground Penetrating Radar	Site	\$6600.00	Assumes GPR survey and full report of findings with maps, could include Magnetic or Seismic Survey
3	Concrete Coring	Boring	\$131.30	
4	Airknifing (per day)	Unit	\$1575.00	
5	Airknifing (per half day)	Unit	\$787.50	
6	Hand clearance of borehole	Foot	\$31.50	
7	Asphalt Surface Patch	Well	\$52.50	
8	Concrete Surface Patch	Well	\$52.50	
9	Half Day Direct Push truck	Unit	\$1265.00	Assumes operator and supplies portal to portal, sample screening equipment and supplies, sample containers.
10	Full Day Direct Push truck	Unit	\$1738.00	Assumes operator and supplies portal to portal, sample screening equipment and supplies, sample containers.
11	Half Day Direct Push truck	Unit	\$1265.00	Assumes operator and supplies portal to portal, sample screening equipment and supplies, sample containers.
12	Full Day Direct Push truck	Unit	\$2157.50	Assumes operator and supplies portal to portal, sample screening equipment and supplies, sample containers.
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$472.50	Installation of surface protection, 2' by 2' concrete pad and flush mount manhole cover
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$157.50	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$6.30	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$49.90	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$55.20	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$60.40	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$525.00	Installation of surface protection, 2' by 2' concrete pad and flush mount manhole cover
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$88.30	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$93.60	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$98.80	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.

	Description	Unit	Cost	Assumptions
23	Rock Coring / Air Rotary	Foot	\$130.30	Assumes riser / screen and well construction materials.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$630.00	Installation of surface protection, 2' by 2' concrete pad and flush mount manhole cover
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$93.60	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$98.80	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$104.10	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$8.40	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$10.50	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$10.50	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$12.60	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$14.70	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$15.80	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$15.80	
Miscellaneous				
35	ARRA Signage & Installation	Site	\$900.00	Includes materials, equipment and labor for installation
36	Well Development and Sampling Equipment & Supplies	Day	\$245.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
37	Slug Testing equipment and supplies	Day	\$330.00	Includes data logger, down hole transducer, bailers, slugs and misc. equipment
38	Free Product Recovery materials, equipment and supplies.	Event	\$235.00	Includes bailers, interface probe, absorbent wicks-booms and misc. equipment
39	Drum (55 Gallon Steel)	Drum	\$40.00	DOT approved open top
40	Manifest/Waste Disposal - Soil	Drum	\$150.00	
41	Manifest/Waste Disposal - Water	Drum	\$150.00	41
42	Manifest/Waste Disposal - Product - Haz Disposal	Drum	\$450.00	42
43	Portable lighting and generator	Day	\$105.00	

	Description	Unit	Cost	Assumptions
44	Surveying equipment	Day	\$50.00	
45	Site traffic control equipment	Day	\$105.00	
46	Work vehicle	Day	\$75.00	
47	Work Truck	Day	\$100.00	
Laboratory				
48	Fraction Organic Carbon	Each	\$63.00	
49	Total Lead	Each	\$21.00	
50	Total Dissolved Solids	Each	\$16.00	
51	Total Suspended Solids	Each	\$16.00	
52	Ignitibility/Flash	Each	\$53.00	
53	Paint Filter Test	Each	\$16.00	
54	pH	Each	\$11.00	
55	TCLP Lead	Each	\$78.80	
56	TCLP Volatiles	Each	\$183.80	
57	TCLP Semivolatiles	Each	\$220.50	
58	RCRA Metals	Each	\$78.80	
59	Atterberg Limits	Each	\$63.00	
60	Density Test	Each	\$31.50	
61	EXTRUDE Tube	Each	\$21.00	
62	Grain Size with Hydrometer	Each	\$63.00	
63	Porosity	Each	\$31.50	
64	Specific Gravity	Each	\$52.50	
65	Vertical Permeability	Each	\$288.80	
66	Moisture Content	Each	\$10.50	
67	USCS Classification	Each	\$31.50	
68	Dry Bulk density	Each	\$31.50	
69	Mobile Laboratory (Day)	Unit	\$1942.50	Analysis includes Analytical Group 1 constituents only, Analytical Group II and III constituents will be analyzed in a fixed lab.
70	Mobile Laboratory (Half Day)	Unit	\$975.00	Analysis includes Analytical Group 1 constituents only, Analytical Group II and III constituents will be analyzed in a fixed lab. Only available in conjunction with full day service
71	Sample shipping	Cooler	\$75.00	
Reporting				
72	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$30.00	Includes one hard copy and one electronic copy
73	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$40.00	Includes one hard copy and one electronic copy
74	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$30.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 3– Parsons Technology – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$625.00	
2	Ground Penetrating Radar	Site	\$525.00	Assumes survey and reporting
3	Concrete Coring	Boring	\$65.00	
4	Airknifing (per day)	Unit	\$1,650.00	
5	Airknifing (per half day)	Unit	\$1,350.00	
6	Hand clearance of borehole	Foot	\$30.00	
7	Asphalt Surface Patch	Well	\$26.00	
8	Concrete Surface Patch	Well	\$22.00	
9	Half Day Direct Push truck	Unit	\$2,845.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$3,245.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$2,845.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$3,245.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$400.00	
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$126.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$3.25	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$35.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
18	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$38.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$40.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$462.00	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$56.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$53.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$54.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
23	Rock Coring / Air Rotary	Foot	\$110.00	Assumes riser / screen and well construction materials.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$600.00	

Region 3– Parsons Technology – Page 2

	Description	Unit	Cost	Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$64.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$65.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$66.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$22.26	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$23.36	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$26.04	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$26.04	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$26.04	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$27.14	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$27.14	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$27.14	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$44.06	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$45.16	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$46.26	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$56.16	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$57.26	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$58.36	
Miscellaneous				
43	ARRA Signage & Installation	Site	\$250.00	
44	Well Development and Sampling Equipment & Supplies	Day	\$1,650.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
45	Slug Testing equipment and supplies	Day	\$1,450.00	
46	Free Product Recovery materials, equipment and supplies.	Event	\$1,550.00	
47	Drum (55 Gallon Steel)	Drum	\$78.75	
48	Manifest/Waste Disposal - Soil	Drum	\$200.00	
49	Manifest/Waste Disposal - Water	Drum	\$200.00	

Region 3– Parsons Technology – Page 3

	Description	Unit	Cost	Assumptions
50	Manifest/Waste Disposal - Product - Haz Disposal	Drum	\$610.00	Manifest/Waste Disposal - Product - Haz Disposal
51	Portable lighting and generator	Day	\$250.00	Portable lighting and generator
52	Surveying equipment	Day	\$50.00	Surveying equipment
53	Site traffic control equipment	Day	\$35.00	Site traffic control equipment
54	Work vehicle	Day	\$75.00	Work vehicle
55	Work Truck	Day	\$100.00	Work Truck
Laboratory				
56	Fraction Organic Carbon	Each	\$65.00	
57	Total Lead	Each	\$15.00	
58	Total Dissolved Solids	Each	\$20.00	
59	Total Suspended Solids	Each	\$20.00	
60	Ignitibility/Flash	Each	\$65.00	
61	Paint Filter Test	Each	\$20.00	
62	pH	Each	\$20.00	
63	TCLP Lead	Each	\$100.00	
64	TCLP Volatiles	Each	\$200.00	
65	TCLP Semivolatiles	Each	\$250.00	
66	RCRA Metals	Each	\$75.00	
67	Atterberg Limits	Each	\$60.00.	
68	Density Test	Each	\$75.00	
69	EXTRUDE Tube	Each	\$25.00	
70	Grain Size with Hydrometer	Each	\$90.00	
71	Porosity	Each	\$55.00	
72	Specific Gravity	Each	\$90.00	
73	Vertical Permeability	Each	\$225.00	
74	Moisture Content	Each	\$45.00	
75	USCS Classification	Each	\$120.00	
76	Dry Bulk density	Each	\$45.00	
77	Mobile Laboratory (Day)	Unit	\$2,520.00	
78	Mobile Laboratory (Half Day)	Unit	\$2,420.00	
79	Sample shipping	Cooler	\$85.00	
Reporting				
80	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$150.00	Includes one hard copy and one electronic copy
81	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$200.00	Includes one hard copy and one electronic copy
82	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$150.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 4– BJAAM Environmental – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$2,250.00	Includes GPR Survey plus additional clearing techniques
2	Ground Penetrating Radar	Site	\$1,750.00	Assumes survey and reporting
3	Concrete Coring	Boring	\$55.00	
4	Airknifing (per day)	Unit	\$750.00	Cost of Soil Vac w/Operator only - Add air compressor, generator
5	Airknifing (per half day)	Unit	\$ 750.00	Cost of Soil Vac w/Operator only - Add air compressor, generator
6	Hand clearance of borehole	Foot	\$ 25.00	
7	Asphalt Surface Patch	Well	\$50.00	
8	Concrete Surface Patch	Well	\$50.00	
9	Half Day Direct Push truck	Unit	\$1,500.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$1,500.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$1,500.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$1,500.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$625.00	Assumes 20 foot depth 10' screen Pre-Pack Well via Direct Push Installation
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$150.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$ 15.00	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$45.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers. Includes PID Meter, decon and borehole abandonment.
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$45.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers. Includes PID Meter, decon and borehole abandonment.
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$50.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers. Includes PID Meter, decon and borehole abandonment.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$725.00	Assumes 20 foot depth 10' screen Pre-Pack Well via Direct Push Installation
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$69.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$69.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.

Region 4– BJAAM Environmental – Page 2

	Description	Unit	Cost	Assumptions
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$74.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.
23	Rock Coring / Air Rotary	Foot	MW Rate +25.00/Ft	Assumes riser / screen and well construction materials. Includes all MW Installation Costs. Extra for Air Compressor.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	N/A	
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$ 75.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$ 75.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$80.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials. Includes PID Meter, Well Surface Completion and Decon.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$25.00	Includes HSA Rig, Materials and Operator
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$25.00	Includes HSA Rig, Materials and Operator
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$25.00	Includes HSA Rig, Materials and Operator
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$35.00	Includes HSA Rig, Materials and Operator
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$25.00	Includes HSA Rig, Materials and Operator
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	25.00	Includes HSA Rig, Materials and Operator
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$30.00	Includes HSA Rig, Materials and Operator

Region 3– BJAAM Environmental– Page 3

	Description	Unit	Cost	Assumptions
39	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$30.00	Includes HSA Rig, Materials and Operator
40	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$35.00	Includes HSA Rig, Materials and Operator
Miscellaneous				
41	ARRA Signage & Installation	Site	\$650.00	
42	Well Development and Sampling Equipment & Supplies	Day	\$275.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
43	Slug Testing equipment and supplies	Day	\$200.00	
44	Free Product Recovery materials, equipment and supplies.	Event	\$75.00	
45	Drum (55 Gallon Steel)	Drum	\$20.00	
46	Manifest/Waste Disposal - Soil	Drum	\$125.00	
47	Manifest/Waste Disposal - Water	Drum	\$75.00	
48	Manifest/Waste Disposal - Product - Haz Disposal	Drum	Cost +	Assume Gas, Diesel, K-1 or Used Oil Waste (bill at Cost Plus 7%)
49	Portable lighting and generator	Day	\$150.00	
50	Surveying equipment	Day	\$75.00	
51	Site traffic control equipment	Day	\$250.00	
52	Work vehicle	Day	\$100.00	
53	Work Truck	Day	\$100.00	
Laboratory				
54	Fraction Organic Carbon	Each	\$69.50	
55	Total Lead	Each	\$10.70	
56	Total Dissolved Solids	Each	\$12.80	
57	Total Suspended Solids	Each	\$9.60	
58	Ignitibility/Flash	Each	\$37.50	
59	Paint Filter Test	Each	\$12.80	
60	pH	Each	\$ 21.40	
61	TCLP Lead	Each	\$53.50	
62	TCLP Volatiles	Each	\$123.00	
63	TCLP Semivolatiles	Each	\$176.50	
64	RCRA Metals	Each	\$53.50	
65	Atterberg Limits	Each	\$160.50	Includes Grain Size and USCS Class
66	Density Test	Each	\$37.50	
67	EXTRUDE Tube	Each	-	
68	Grain Size with Hydrometer	Each	\$160.50	Includes Atterburg and USCS Class
69	Porosity	Each	\$55.60	
70	Specific Gravity	Each	\$58.80	
71	Vertical Permeability	Each	\$305.00	
72	Moisture Content	Each	\$7.50	

Region 3– BJAAM Environmental– Page 4

	Description	Unit	Cost	Assumptions
73	USCS Classification	Each	160.50	Includes Atterburg and Grain Size
74	Dry Bulk density	Each	37.50	
75	Mobile Laboratory (Day)	Unit	2,200.00	
76	Mobile Laboratory (Half Day)	Unit	2,200.00	
77	Sample shipping	Cooler	15.00	
Reporting				
78	Tier 1 report supplies, materials, shipping, and incidentals	LS	50.00	Includes one hard copy and one electronic copy
79	Tier 2 report supplies, materials, shipping, and incidentals	LS	50.00	Includes one hard copy and one electronic copy
80	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	50.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 5– Delta Consultants – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$1,300.00	
2	Ground Penetrating Radar	Site	\$2,500.00	Assumes survey and reporting (includes EM)
3	Concrete Coring	Boring	\$85.00	
4	Airknifing (per day)	Unit	\$2,400.00	
5	Airknifing (per half day)	Unit	\$2,400.00	
6	Hand clearance of borehole	Foot	\$80.00	
7	Asphalt Surface Patch	Well	\$55.00	
8	Concrete Surface Patch	Well	\$50.00	
9	Half Day Direct Push truck	Unit	\$2,750.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$2,950.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$2,750.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$2,950.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$600.00	
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$180.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$30.00	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$88.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$80.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$75.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$650.00	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$88.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$80.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$75.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
23	Rock Coring / Air Rotary	Foot	\$75.00	Assumes riser / screen and well construction materials.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$850.00	

	Description	Unit	Cost	Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$98.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$88.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$80.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$48.00	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$55.00	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$60.00	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$60.00	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$60.00	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$75.00	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$70.00	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$65.00	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$80.00	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$80.00	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$80.00	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$95.00	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$90.00	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$85.00	
Miscellaneous				
42	ARRA Signage & Installation	Site	\$2,500.00	
43	Well Development and Sampling Equipment & Supplies	Day	\$950.00	
44	Slug Testing equipment and supplies	Day	\$450.00	
45	Free Product Recovery materials, equipment and supplies.	Event	\$350.00	
46	Drum (55 Gallon Steel)	Drum	\$75.00	
47	Manifest/Waste Disposal - Soil	Drum	\$300.00	
48	Manifest/Waste Disposal - Water	Drum	\$300.00	
49	Manifest/Waste Disposal - Product - Haz Disposal	Drum	\$500.00	
50	Portable lighting and generator	Day	\$150.00	

Region 5– Delta Consultants – Page 3

	Description	Unit	Cost	Assumptions
51	Surveying equipment	Day	\$75.00	
52	Site traffic control equipment	Day	\$50.00	Cones and barricades only
53	Work vehicle	Day	\$100.00	
54	Work Truck	Day	\$100.00	
Laboratory\$				
55	Fraction Organic Carbon	Each	\$90.00	Walkley-Black
56	Total Lead	Each	\$20.00	
57	Total Dissolved Solids	Each	\$25.00	
58	Total Suspended Solids	Each	\$25.00	
69	Ignitibility/Flash	Each	\$75.00	
60	Paint Filter Test	Each	\$25.00	
61	pH	Each	\$20.00	
62	TCLP Lead	Each	\$125.00	
63	TCLP Volatiles	Each	\$200.00	
64	TCLP Semivolatiles	Each	\$250.00	
65	RCRA Metals	Each	\$85.00	
66	Atterberg Limits	Each	\$55.00	D4318
67	Density Test	Each	\$95.00	
68	EXTRUDE Tube	Each	\$80.00	
69	Grain Size with Hydrometer	Each	\$100.00	D422
70	Porosity	Each	\$90.00	ASA 18-2.1.3
71	Specific Gravity	Each	\$50.00	D854
72	Vertical Permeability	Each	\$200.00	D2434
73	Moisture Content	Each	\$10.00	
74	USCS Classification	Each	\$175.00	
75	Dry Bulk density	Each	\$100.00	
76	Mobile Laboratory (Day)	Unit	\$3,200.00	
77	Mobile Laboratory (Half Day)	Unit	\$3,200.00	
78	Sample shipping	Cooler	\$100.00	
Reporting				
79	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$250.00	Includes one hard copy and one electronic copy
80	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$250.00	Includes one hard copy and one electronic copy
81	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$250.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 6– URS Corporation – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$840.00	
2	Ground Penetrating Radar	Site	\$200/hour	Assumes survey and reporting.
3	Concrete Coring	Boring	\$62.40	Concrete coring machine and 4"bit
4	Airknifing (per day)	Unit	\$1560.00	
5	Airknifing (per half day)	Unit	\$1150.00	
6	Hand clearance of borehole	Foot	\$20.00	
7	Asphalt Surface Patch	Well	\$23.00	
8	Concrete Surface Patch	Well	\$18.00	
9	Half Day Direct Push truck	Unit	\$713.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$950.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$1250.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$1550.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$153.00	
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$85.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$3.00	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$34.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$35.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$36.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers.
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$165.00	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$52.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$50.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$50.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
23	Rock Coring / Air Rotary	Foot	\$73.00	Assumes riser / screen and well construction materials.
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$196.00	

Region 6– URS Corporation – Page 2

	Description	Unit	Cost	Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$60.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$60.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$60.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$22.00	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$22.00	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$24.00	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$24.00	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$24.00	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$25.00	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$25.00	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$25.00	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$41.00	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$41.00	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$43.00	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$52.00	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$53.00	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$54.00	
Miscellaneous.				
42	ARRA Signage & Installation	Site	\$1,000.00	Assumed one sign with installation
43	Well Development and Sampling Equipment & Supplies	Day	\$284.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc. Assuming 4- 2" monitoring wells.
44	Slug Testing equipment and supplies	Day	\$560.00	Assuming 3 wells
45	Free Product Recovery materials, equipment and supplies.	Event	\$205.50	Assuming all 2" monitoring wells
46	Drum (55 Gallon Steel)	Drum	\$283.55	5 soil drums, 1 groundwater drum
47	Manifest/Waste Disposal - Soil	Drum	\$105.00	
48	Manifest/Waste Disposal - Water	Drum	\$105.00	

	Description	Unit	Cost	Assumptions
49	Portable lighting and generator	Day	\$125.00	Two Halogen lights with generator
50	Surveying equipment	Day	\$30.00	
51	Site traffic control equipment	Day	\$500.00	
52	Work vehicle	Day	\$40.00	Car
53	Work Truck	Day	\$50.00	
Laboratory				
54	Fraction Organic Carbon	Each	\$45.00	
55	Total Lead	Each	\$10.00	
56	Total Dissolved Solids	Each	\$12.00	
57	Total Suspended Solids	Each	\$9.00	
58	Ignitibility/Flash	Each	\$25.00	
59	Paint Filter Test	Each	\$12.00	
60	pH	Each	\$25.00	
61	TCLP Lead	Each	\$65.00	
62	TCLP Volatiles	Each	\$50.00	
63	TCLP Semivolatiles	Each	\$25.00	
64	RCRA Metals	Each	\$50.00	
65	Atterberg Limits	Each	\$75.00	
66	Density Test	Each	\$50.00	
67	EXTRUDE Tube	Each	\$60.00	
68	Grain Size with Hydrometer	Each	\$75.00	
69	Porosity	Each	\$10.00	
70	Specific Gravity	Each	\$70.00	
71	Vertical Permeability	Each	\$300.00	
72	Moisture Content	Each	\$8.50	
73	USCS Classification	Each	\$5.00	
74	Dry Bulk density	Each	\$15.00	
75	Mobile Laboratory (Day)	Unit	\$2160.00	
76	Mobile Laboratory (Half Day)	Unit	NA	No half day rate available
77	Sample shipping	Cooler	NA	Included in Laboratory unit cost
Reporting				
78	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$2335.00	Includes one hard copy and one electronic copy
79	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$4596.00	Includes one hard copy and one electronic copy
80	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	FPR-\$400; IRA Wplan \$435; Tier 3 Wplan \$435 Tier 2 Calibrated Model \$3252; Tier 3 Evaluation \$3253	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 7– Spence Environmental – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$150.00	Assumes Utility One-Calls
2	Ground Penetrating Radar	Site	\$2500.00	Assumes survey and reporting
3	Concrete Coring	Boring	\$75.00	
4	Airknifing (per day)	Unit	\$1300.00	
5	Airknifing (per half day)	Unit	\$900.00	
6	Hand clearance of borehole	Foot	\$20.00	
7	Asphalt Surface Patch	Well	\$65.00	
8	Concrete Surface Patch	Well	\$65.00	
9	Half Day Direct Push truck	Unit	\$1350.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$1850.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$1650.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$2050.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$200.00	Supply cost only, does not include daily rig rate
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$120.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$5.00	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$27.00	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$33.00	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$45.00	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$240.00	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$36.00	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$43.00	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$49.00	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
23	Rock Coring / Air Rotary	Foot	\$47.00	Assumes riser/screen and well construction materials
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$260.00	

Region 7– Spence Environmental – Page 2

	Description	Unit	Cost	Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$47.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$54.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$60.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$10.00	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$12.00	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$12.00	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$15.00	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$17.00	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$15.00	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$17.00	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$19.00	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$17.00	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$19.00	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$21.00	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$19.00	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$21.00	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$23.00	
Miscellaneous.				
42	ARRA Signage & Installation	Site	\$2800.00	4' x 8' Aluminum Sign Installed
43	Well Development and Sampling Equipment & Supplies	Day	\$230.00	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
44	Slug Testing equipment and supplies	Day	\$265.00	
45	Free Product Recovery materials, equipment and supplies.	Event	\$180.00	
46	Drum (55 Gallon Steel)	Drum	\$50.00	
47	Manifest/Waste Disposal - Soil	Drum	\$160.00	
48	Manifest/Waste Disposal - Water	Drum	\$160.00	

Region 7– Spence Environmental – Page 3

	Description	Unit	Cost	Assumptions
49	Manifest/Waste Disposal – Product – Haz Disposal	Drum	N/A	On a pre needed basis
50	Portable lighting and generator	Day	\$140.00	Two Halogen lights with generator
51	Surveying equipment	Day	\$70.00	
52	Site traffic control equipment	Day	\$120.00	
53	Work vehicle	Day	\$140.00	
54	Work Truck	Day	\$180.00	
Laboratory				
55	Fraction Organic Carbon	Each	\$55.00	
56	Total Lead	Each	\$11.00	
57	Total Dissolved Solids	Each	\$14.00	
58	Total Suspended Solids	Each	\$10.00	
59	Ignitibility/Flash	Each	\$28.00	
60	Paint Filter Test	Each	\$14.00	
61	pH	Each	\$7.00	
62	TCLP Lead	Each	\$55.00	
63	TCLP Volatiles	Each	\$130.00	
64	TCLP Semivolatiles	Each	\$185.00	
65	RCRA Metals	Each	\$55.00	
66	Atterberg Limits	Each	\$55.00	
67	Density Test	Each	\$185.00	
68	EXTRUDE Tube	Each	\$40.00	
69	Grain Size with Hydrometer	Each	\$145.00	
70	Porosity	Each	\$30.00	
71	Specific Gravity	Each	\$85.00	
72	Vertical Permeability	Each	\$400.00	
73	Moisture Content	Each	\$10.00	
74	USCS Classification	Each	\$150.00	
75	Dry Bulk density	Each	\$11.00	
76	Mobile Laboratory (Day)	Unit	\$2300.00	
77	Mobile Laboratory (Half Day)	Unit	\$1150.00	12 BTEX/MTBE and 12 GRO only, \$90 ea. per PAH, \$50 Ea. per DRO
78	Sample shipping	Cooler	\$80.00	6 BTEX/MTBE and 6 GRO only, \$90 ea. per PAH, \$50 Ea. per DRO
Reporting				
79	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$100.00	Includes one hard copy and one electronic copy
80	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$100.00	Includes one hard copy and one electronic copy
81	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$100.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

Region 8– SRW Environmental – Page 1

	Description	Unit	Cost	Assumptions
Drilling				
1	Site Utility Clearance	Site	\$2,475.00	Includes Ground penetrating Radar
2	Ground Penetrating Radar	Site	\$1,925.00	Assumes survey and reporting
3	Concrete Coring	Boring	\$60.50	
4	Airknifing (per day)	Unit	\$825.00	
5	Airknifing (per half day)	Unit	\$825.00	
6	Hand clearance of borehole	Foot	\$27.50	
7	Asphalt Surface Patch	Well	\$55.00	
8	Concrete Surface Patch	Well	\$55.00	
9	Half Day Direct Push truck	Unit	\$1,650.00	Assumes operator and supplies portal to portal
10	Full Day Direct Push truck	Unit	\$1,650.00	Assumes operator and supplies portal to portal
11	Half Day Direct Push truck	Unit	\$1,650.00	Assumes operator and supplies portal to portal
12	Full Day Direct Push truck	Unit	\$1,650.00	Assumes operator and supplies portal to portal
13	1.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$687.50	
14	Pre-pack wells - 1 inch - screen - 5 foot section	Section	\$165.00	
15	1.0" PVC Riser and Holeplug seal (per foot)	Foot	\$16.50	Assumes well construction materials
16	Soil Borings by Hollow Stem Auger - (0-30')	Foot	\$49.50	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
17	Soil Borings by Hollow Stem Auger - (30.25-60')	Foot	\$49.50	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
18	Soil Borings by Hollow Stem Auger - (>60.25')	Foot	\$55.00	Assumes continuous sampling, sampling screening equipment and supplies, sample containers
19	2.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	\$797.50	
20	2" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$75.90	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
21	2" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$75.90	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
22	2" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$88.00	Assumes continuous sampling, sampling screening equipment and supplies, riser/screen and well construction materials
23	Rock Coring / Air Rotary	Foot	MW Rate + \$27.50/ft	Assumes riser/screen and well construction materials
24	4.0" Permanent MW Install: steel point, bottom plug, locking plug, concrete, concrete saw, flush-mount cover and ODNR Installation Report (each)	Well	N/A	

Region 8– SRW Environmental – Page 2

	Description	Unit	Cost	Assumptions
25	4" GW MW's by Hollow Stem Auger - (0-30')	Foot	\$82.50	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
26	4" GW MW's by Hollow Stem Auger - (30.25-60')	Foot	\$82.50	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
27	4" GW MW's by Hollow Stem Auger - (>60.25')	Foot	\$88.00	Assumes continuous sampling, sample screening equipment and supplies, sample containers, riser / screen and well construction materials.
28	Well Plugging/Well Abandonment of 2" Well by bentonite powder (0-30')	Foot	\$27.50	
29	Well Plugging/Well Abandonment of 4" Well by bentonite powder (0-30')	Foot	\$33.00	
30	Well Plugging/Well Abandonment of 2" Well by cement slurry (0-30')	Foot	\$27.50	
31	Well Plugging/Well Abandonment of 2" Well by cement slurry (31-60')	Foot	\$27.50	
32	Well Plugging/Well Abandonment of 2" Well by cement slurry (>60')	Foot	\$33.00	
33	Well Plugging/Well Abandonment of 4" Well by cement slurry (0-30')	Foot	\$33.00	
34	Well Plugging/Well Abandonment of 4" Well by cement slurry (31-60')	Foot	\$33.00	
35	Well Plugging/Well Abandonment of 4" Well by cement slurry (>60')	Foot	\$38.50	
36	2" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$27.50	
37	2" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$27.50	
38	2" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$33.00	
39	4" Well Abandonment by Overdrilling & Grouting - (0-30')	Foot	\$33.00	
40	4" Well Abandonment by Overdrilling & Grouting - (30.25-60')	Foot	\$33.00	
41	4" Well Abandonment by Overdrilling & Grouting - (>60.25')	Foot	\$38.50	
Miscellaneous.				
42	ARRA Signage & Installation	Site	\$650.00	
43	Well Development and Sampling Equipment & Supplies	Day	\$438.15	Includes bailer/pump, surge block, cord, water level meter/interface probe, water quality meter, gloves, ice, cooler, etc.
44	Slug Testing equipment and supplies	Day	\$400.15	
45	Free Product Recovery materials, equipment and supplies.	Event	\$227.15	
46	Drum (55 Gallon Steel)	Drum	\$45.00	
47	Manifest/Waste Disposal - Soil	Drum	\$125.00	
48	Manifest/Waste Disposal - Water	Drum	\$125.00	

Region 8– SRW Environmental – Page 3

	Description	Unit	Cost	Assumptions
49	Manifest/Waste Disposal – Product – Haz Disposal	Drum	\$325.00	On a pre needed basis
50	Portable lighting and generator	Day	\$265.00	Two Halogen lights with generator
51	Surveying equipment	Day	\$75.00	
52	Site traffic control equipment	Day	\$50.00	
53	Work vehicle	Day	\$75.00	
54	Work Truck	Day	\$100.00	
Laboratory				
55	Fraction Organic Carbon	Each	\$55.00	
56	Total Lead	Each	\$33.00	
57	Total Dissolved Solids	Each	\$22.00	
58	Total Suspended Solids	Each	\$22.00	
59	Ignitibility/Flash	Each	\$27.50	
60	Paint Filter Test	Each	\$16.50	
61	pH	Each	\$11.00	
62	TCLP Lead	Each	\$88.00	
63	TCLP Volatiles	Each	\$165.00	
64	TCLP Semivolatiles	Each	\$247.50	
65	RCRA Metals	Each	\$99.00	
66	Atterberg Limits	Each	\$57.20	Includes grain size analysis and USCS Classification
67	Density Test	Each	\$52.25	
68	EXTRUDE Tube	Each	\$19.25	
69	Grain Size with Hydrometer	Each	\$121.00	Includes USCS Classification
70	Porosity	Each	\$104.50	
71	Specific Gravity	Each	\$52.25	
72	Vertical Permeability	Each	\$467.50	
73	Moisture Content	Each	\$9.08	
74	USCS Classification	Each	\$121.00	Included w/Atterberg limits test & Grain size w/hydrometer test
75	Dry Bulk density	Each	\$74.25	
76	Mobile Laboratory (Day)	Unit	\$2,650.00	Assumes both VOC & SVOC needed
77	Mobile Laboratory (Half Day)	Unit	\$2,650.00	Assumes both VOC & SVOC needed
78	Sample shipping	Cooler	50.00	
Reporting				
79	Tier 1 report supplies, materials, shipping, and incidentals	LS	\$50.00	Includes one hard copy and one electronic copy
80	Tier 2 report supplies, materials, shipping, and incidentals	LS	\$50.00	Includes one hard copy and one electronic copy
81	Miscellaneous reports (FPR, IRA, Tier 3, etc.) supplies, materials, shipping, and incidentals	LS	\$50.00	Includes one hard copy and one electronic copy
All costs listed above include vendor's overhead and profit mark-up.				

SUMMARY OF AMENDMENTS

Amendment Number	Revision Date	Description
1	4/12/10	Add cost specific detail for site assessment and cleanup not already captured.