00-00-103 (6/78)

New York State Department of Environmental Conservation

MEMORANDUM

TO:
FROM:
SUBJECT:

DATE:

workplan.hw.130009-130053B.2011-10-26.D004436-04_AECOM.pdf

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, 12th Floor
625 Broadway, Albany, New York 12233-7012
Phone: (518) 402-9764 • **Fax:** (518) 402-9722
Website: www.dec.ny.gov

Joe Martens
Commissioner

October 26, 2011

100584-05

Scott Underhill, P.E.
AECOM Technical Services Northeast, Inc
40 British American Blvd
Latham, NY 12110

RE: Amendment Schedule 2.11s Approval
Contract/WA No.: D004436-4.1
Site/Spill Name: Photocircuits/Pall Corp
Site/Spill No./PIN: 130009/130053B
Work Element: RI/FS

Dear Mr. Underhill:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) hereby approves the enclosed Schedule 2.11s for the above referenced WA Amendment in the amount of $21,713 for a total WA amount not to exceed $822,659. Your firm may now submit a request for reimbursement for work completed under this WA.

If you have any questions regarding the WA, please contact the Project Manager, Joseph Jones, at (518) 402-9621.

Photo - 10,856.50
Pall - 10,856.50

Sincerely,

Eric R. Obrecht, P.E.
Chief
Contracts and Payments Section
Bureau of Program Management
Division of Environmental Remediation

Attachments

ec: J. Jones
P. Kappeller
D. Desnoyers
R. Schick
D. Weigel
J. Harrington
G. Bobersky
W. Parish
D. Finlayson
T. Wolosen
M/WBE Unit

bec: E. Obrecht
L.Lewis

AECOM
40 British American Boulevard
Latham, NY 12110

518.951.2200 tel
518.951.2300 fax

October 25, 2011

Ms. Patricia Kappeller
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
625 Broadway
Albany, New York 12233-7012

Subject: **NYSDEC Contract D004436 Work Assignment #4.1**
Photocircuits/Pall Corp OU2, Glen Cove, NY (Sites 130009 and 130053B)
Budget Approval Package

Dear Ms. Kappeller:

AECOM Technical Services Northeast, Inc. (AECOM) is pleased to submit this Procurement Package in support of the Form 2.11 project budget amendment to complete a Remedial Investigation/Feasibility Study (RI/FS) at Photocircuits/ Pall Corp OU2, Sites No. 130009 and 130053B, located on Sea Cliff Avenue, in Glen Cove, Nassau County, New York. This package documents the efforts and rationale used to complete the amendment and incorporate new tasks, EQuIS data deliverables and additional PRAP Support, into the work assignment.

SCOPE OF WORK AND ASSUMPTIONS

The scope of work consists of two new tasks: Task 5, EQuIS Data Deliverables; and Task 6, Additional PRAP Support.

Task 5, EQuIS Data Deliverables. Task 5 consists of retrieving the monitoring well data generated by Mitkem Laboratories (now Spectrum Analytical) for this work assignment from storage and generating a NYSDEC-compliant EQuIS data deliverable. AECOM will take the initial laboratory-generated EQuIS EDD and incorporate the additional sample, well construction, and data validation information. The proposed scope also includes any necessary changes or corrections for the submission to pass the NYSDEC EDD checker.

The specific EQuIS format fields to be provided under this scope are:

- DataProvider
- Subfacility
- Location
- WellConstruction
- Well
- WaterLevel
- Sample
- TestResults

AECOM has also provided a contingency subtask and budget for incorporating any additional data or information into the EQuIS deliverable, shown as Task 5.02 on the attached Forms 2.11. This budget will be used only in the event that NYSDEC requests provision of additional fields beyond those itemized above.

Task 6, Additional PRAP Support. AECOM has been providing post-FS support to NYSDEC in support of NYSDEC's preparation of the Proposed Remedial Action Plan (PRAP). Work to date has included incorporating an additional NYSDEC-requested remedial alternative into the FS, and incorporating NYSDEC-requested FS text revisions into the FS for consistency with format and wording being utilized by NYSDEC in the PRAP. Based on conversation with the NYSDEC PM and the work currently outstanding, we anticipate comments on submissions currently under review by NYSDEC and making further edits to the text and drawings of the FS prior to finalization, as well as providing input as requested to NYSDEC in finalizing the PRAP. Costs incurred to date (earlier this year) on this work were billed under Task 4 (feasibility study); costs not yet incurred will be tracked under this new Task 6.

SUBCONTRACTOR PROCUREMENT DETAILS

The only subcontractor utilized in this amendment is Spectrum Analytical. As noted above, Task 5 consists of retrieving the monitoring well data generated by Mitkem Laboratories (now Spectrum Analytical) for this work assignment from storage and generating a NYSDEC-compliant EQuIS data deliverable. Spectrum is a sole source provider for this service (no other firm has access to their data archive) and has quoted a price of $75 for each of the 11 monitoring well groundwater data SDGs to retrieve the analytical data and create a preliminary EQuIS deliverable. Spectrum noted that this cost is based on their experience in doing similar work on other NYSDEC standby subcontracts.

PROJECT SCHEDULE

Anticipated completion dates for the work are provided below:

Task 5, EQuIS Data Deliverable	December 2011
Task 6, Additional PRAP Support	March 2012

BUDGET WORKSHEETS

Attached are the 2.11 worksheets and the cost review worksheet for your use and review. Based on the proposed schedule, the project will be completed by the end of March 2012. This additional funding increases the contract budget from $800,946 to $822,659. Of this, $9,328 is for previous PRAP support and $12,905 will be used to complete the submission of EQuIS deliverables and PRAP tasks.

All the work will be completed in the fiscal year 2011 ($21,715).

If there are any questions regarding this procurement report, please contact me directly at 732-564-3612 or Angela TomaEisele at (518) 951-2307.

Sincerely,

AECOM Technical Services Northeast, Inc.

Allen Burton
Project Manager

Enclosure: Attachments

cc: Joe Jones, NYSDEC PM

Scott Underhill, PE, AECOM Contract Manager
Angela Toma-Eisele, AECOM Assistant Contract Manager

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
TABLE 1.0
SUMMARY OF BUDGETED PROJECT COSTS

TASK	Direct Labor (a)	Indirect Costs 146.80%	Fixed Fee 10.5%	Travel & Subsistence	Other Direct Costs(c)	Cost plus Fixed Fee (d) Subcontractor	Sub Con Management Fee 5%	Unit Price (e) Subcontractor	TOTAL COLUMNS (1A-5)
Task 1 - Work Plan Development	**$22,372.37**	**$32,842.64**	**$5,797.58**	**$0.00**	**$35.56**	**$0.00**	**$0.00**	**$0.00**	**$61,048.15**
01A - Draft Work Plan	$18,039.47	$26,481.94	$4,674.75	$0.00	$35.56	$0.00	$0.00	$0.00	$49,231.72
01B - Final Work Plan	$4,332.90	$6,360.70	$1,122.83	$0.00	$0.00	$0.00	$0.00	$0.00	$11,816.43
Task 2 - Remedial Investigation	**$80,321.90**	**$117,912.55**	**$20,814.61**	**$26,727.71**	**$54,928.12**	**$45,209.26**	**$9,457.75**	**$212,988.00**	**$568,359.90**
02.01 - Survey and Base Map Preparation	$3,478.90	$5,107.03	$901.52	$0.00	$0.00	$45,209.26	$0.00	$0.00	$54,696.71
02.02 - Existing Well Condition Survey	$8,549.82	$12,551.13	$2,215.60	$1,022.95	$520.14	$0.00	$0.00	$0.00	$24,859.64
02.03 - Direct Push Groundwater sampling	$4,616.65	$6,777.24	$1,196.36	$619.60	$1,095.58	$0.00	$202.05	$10,303.00	$24,810.48
02.04 - New Well Installation	$26,901.25	$39,491.04	$6,971.19	$11,535.03	$2,503.51	$0.00	$8,242.15	$182,414.00	$278,058.17
02.05 - Groundwater Sampling (2events)	$36,518.04	$53,608.48	$9,463.28	$13,550.13	$49,302.95	$0.00	$1,013.55	$20,271.00	$183,727.43
02.06 - Carney Street Well Field Aquifer test	$257.24	$377.63	$66.66	$0.00	$1,505.94	$0.00	$0.00	$0.00	$2,207.47
Task 3 - Remedial Investigation Report	**$42,081.80**	**$61,776.09**	**$10,905.08**	**$0.00**	**$7.74**	**$0.00**	**$0.00**	**$0.00**	**$114,770.71**
03.01 - RI Report	$42,081.80	$61,776.09	$10,905.08	$0.00	$7.74	$0.00	$0.00	$0.00	$114,770.71
Task 4 - Feasibility Study	**$24,234.07**	**$35,575.62**	**$6,280.02**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$66,089.71**
04.01 - Study	$24,234.07	$35,575.62	$6,280.02	$0.00	$0.00	$0.00	$0.00	$0.00	$66,089.71
Task 5 - EQUiS EDD	**$2,614.57**	**$3,838.18**	**$677.54**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$825.00**	**$7,955.29**
05.01 - Initial Submission	$1,965.84	$2,885.85	$509.43	$0.00	$0.00	$0.00	$0.00	$825.00	$6,186.12
05.02 - Final Submission	$648.73	$952.33	$168.11	$0.00	$0.00	$0.00	$0.00	$0.00	$1,769.17
Task 6 - Additional PRAP	**$1,626.23**	**$2,387.30**	**$421.42**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$4,434.95**
06.01 - Support	$1,626.23	$2,387.30	$421.42	$0.00	$0.00	$0.00	$0.00	$0.00	$4,434.95
Sub Con Mgmt Rules MWBE always 5% Others 5% only when >10,000									
TOTALS	**$173,250.93**	**$254,332.38**	**$44,896.25**	**$26,727.71**	**$54,971.42**	**$45,209.26**	**$9,457.75**	**$213,813.00**	**$822,658.70**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(a)
SUMMARY OF WORK ASSIGNMENT PRICE

1.	DIRECT SALARY COSTS (Schedules 2.10(a) and 2.11(b)	173,251
2.	INDIRECT COSTS (Schedule 2.10(g))	254,332
3.	DIRECT NON-SALARY COSTS (Schedules 2.10(d)(e)(f) and 2.11(c)(d)	81,699

SUBCONTRACT COSTS
COST-PLUS-FIXED-FEE SUBCONTRACTS
(Schedule 2.10(e) and 2.11(e))

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
YEC, Inc	**Design and Engineering**	45,209
4. TOTAL COST-PLUS-FIXED-FEE SUBCONTRACTS		45,209

UNIT PRICE SUBCONTRACTS
(Schedule 2.10(f) and 2.11(f))

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
Mitkem (MBE)	Analysis of Water Samples	21,305
Enviroprobe	Geophysical Survey / Utility Clearance	6,000
Aquifer Drilling and Testing	Direct Push Groundwater Sampling	6,262
Aztech Technologies (WBE)	Hollow Stem Auger Drilling	26,185
Delta Well & Pump (WBE)	Monitoring Well (deep wells)	139,058
Nancy Potak (WBE)	Data Validation	3,432
American Waste Management	Drill Cutting Disposal	8,612
Capital Environmental Services	Waste Removal	2,959
Subcontract mgmt fee		9,458
5. TOTAL UNIT PRICE SUBCONTRACTS		223,271

6.	TOTAL SUBCONTRACT COSTS (Lines 4 + 5)	268,480
7.	FIXED FEE (Schedule 2.10(h))	44,896
8.	TOTAL WORK ASSIGNMENT PRICE (Lines 1 + 2+ 3+ 6 + 7)	**822,659**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

MONTHLY COST CONTROL REPORT
SCHEDULE 2.11(h)
SUMMARY OF LABOR HOURS
NUMBER OF DIRECT LABOR HOURS EXPENDED TO DATE/
ESTIMATED NUMBER OF DIRECT LABOR HOURS TO COMPLETION

LABOR CLASS	IX		VIII		VII		VI		V		IV		III		II		I		TOTAL NO. OF DIRECT LABOR HOUR	
TASK NO.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.	Exp	Est.
Task 1 - Work Plan Development		**24.0**		**170.5**		**33.0**		**40.0**		**112.0**		**24.5**		**73.3**		**20.0**		**2.3**		**499.5**
01A - Draft Work Plan		3.0		170.5		3.5		14.5		109.5		24.5		73.3		4.5		2.3		405.5
01B - Final Work Plan		21.0		0.0		29.5		25.5		2.5		0.0		0.0		15.5		0.0		94.0
Task 2 - Remedial Investigation		**29.5**		**0.5**		**303.3**		**252.5**		**411.5**		**170.3**		**570.3**		**624.5**		**1.0**		**2363.3**
02.01 - Survey and Base Map Preparation		5.0		0.0		52.3		9.0		0.0		0.8		3.0		0.0		0.0		70.0
02.02 - Existing Well Condition Survey		7.5		0.0		40.5		42.5		67.5		0.0		63.0		1.5		0.0		222.5
02.03 - Direct Push Groundwater sampling		12.5		0.0		24.0		30.0		0.0		44.0		0.0		0.0		1.0		111.5
02.04 - New Well Installation		2.0		0.0		104.0		37.5		215.0		119.5		179.3		130.0		0.0		787.3
Task 3 - Remedial Investigation Report		**9.0**		**3.0**		**215.5**		**97.5**		**407.8**		**106.8**		**197.0**		**46.5**		**0.0**		**1083.0**
03.01 - RI Report		9.0		3.0		215.5		97.5		407.8		106.8		197.0		46.5		0.0		1083.0
Task 4 - Feasibility Study		**0.0**		**58.8**		**106.3**		**32.8**		**128.0**		**157.3**		**78.3**		**31.5**		**0.0**		**592.8**
04.01 - Study		0.0		58.8		106.3		32.8		128.0		157.3		78.3		31.5		0.0		592.8
Task 5 - EQUiS EDD		**0.0**		**6.0**		**5.0**		**3.0**		**0.0**		**52.0**		**2.5**		**0.0**		**0.0**		**68.5**
05.01 - Initial Submission		0.0		4.0		4.0		2.0		0.0		40.0		2.0		0.0		0.0		52.0
05.02 - Final Submission		0.0		2.0		1.0		1.0		0.0		12.0		0.5		0.0		0.0		16.5
Task 6 - Additional PRAP		**0.0**		**8.0**		**0.0**		**6.0**		**0.0**		**16.0**		**9.0**		**0.0**		**0.0**		**39.0**
06.01 - Support		0.0		8.0		0.0		6.0		0.0		16.0		9.0		0.0		0.0		39.0
TOTAL		62.5		246.8		663.0		431.8		1059.3		526.8		930.3		722.5		3.3		4646.0

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
TOTAL

LABOR CLASSIFICATION	IX	VIII	VII	VI	V	IV	III	II	I	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**24.00**	**170.50**	**33.00**	**40.00**	**112.00**	**24.50**	**73.25**	**20.00**	**2.25**	**499.50**	**$22,372.37**
01A - Draft Work Plan	3.00	170.50	3.50	14.50	109.50	24.50	73.25	4.50	2.25	405.50	$18,039.47
01B - Final Work Plan	21.00	0.00	29.50	25.50	2.50	0.00	0.00	15.50	0.00	94.00	$4,332.90
Task 2 - Remedial Investigation	**29.50**	**0.50**	**303.25**	**252.50**	**411.50**	**170.25**	**570.25**	**624.50**	**1.00**	**2363.25**	**$80,321.90**
02.01 - Survey and Base Map Preparation	5.00	0.00	52.25	9.00	0.00	0.75	3.00	0.00	0.00	70.00	$3,478.90
02.02 - Existing Well Condition Survey	7.50	0.00	40.50	42.50	67.50	0.00	63.00	1.50	0.00	222.50	$8,549.82
02.03 - Direct Push Groundwater sampling	12.50	0.00	24.00	30.00	0.00	44.00	0.00	0.00	1.00	111.50	$4,616.65
02.04 - New Well Installation	2.00	0.00	104.00	37.50	215.00	119.50	179.25	130.00	0.00	787.25	$26,901.25
02.05 - Groundwater Sampling (2events)	2.50	0.50	77.50	133.50	129.00	6.00	325.00	493.00	0.00	1167.00	$36,518.04
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	$257.24
Task 3 - Remedial Investigation Report	**9.00**	**3.00**	**215.50**	**97.50**	**407.75**	**106.75**	**197.00**	**46.50**	**0.00**	**1083.00**	**$42,081.80**
03.01 - RI Report	9.00	3.00	215.50	97.50	407.75	106.75	197.00	46.50	0.00	1083.00	$42,081.80
Task 4 - Feasibility Study	**0.00**	**58.75**	**106.25**	**32.75**	**128.00**	**157.25**	**78.25**	**31.50**	**0.00**	**592.75**	**$24,234.07**
04.01 - Study	0.00	58.75	106.25	32.75	128.00	157.25	78.25	31.50	0.00	592.75	$24,234.07
Task 5 - EQUiS EDD	**0.00**	**6.00**	**5.00**	**3.00**	**0.00**	**52.00**	**2.50**	**0.00**	**0.00**	**68.50**	**$2,614.57**
05.01 - Initial Submission	0.00	4.00	4.00	2.00	0.00	40.00	2.00	0.00	0.00	52.00	$1,965.84
05.02 - Final Submission	0.00	2.00	1.00	1.00	0.00	12.00	0.50	0.00	0.00	16.50	$648.73
Task 6 - Additional PRAP	**0.00**	**8.00**	**0.00**	**6.00**	**0.00**	**16.00**	**9.00**	**0.00**	**0.00**	**39.00**	**$1,626.23**
06.01 - Support	0.00	8.00	0.00	6.00	0.00	16.00	9.00	0.00	0.00	39.00	$1,626.23
TOTAL LABOR HOURS	62.50	246.75	663.00	431.75	1059.25	526.75	930.25	722.50	3.25	4646.00	
TOTAL LABOR DOLLARS	$4,004.60	$10,272.63	$33,457.03	$17,157.33	$40,620.27	$10,308.57	$23,845.44	$16,474.49	$52.99		**$173,250.93**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2006

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $61.62	VIII $60.25	VII $47.72	VI $40.50	V $36.16	IV $29.38	III $26.33	II $23.25	I $16.02	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**3.00**	**170.50**	**2.50**	**0.00**	**108.00**	**13.50**	**22.25**	**4.00**	**1.50**	**325.25**	**$15,581.57**
01A - Draft Work Plan	3.00	170.50	2.50	0.00	108.00	13.50	22.25	4.00	1.50	325.25	$15,581.57
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
06.01 - Support	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	3.00	170.50	2.50	0.00	108.00	13.50	22.25	4.00	1.50	325.25	
TOTAL LABOR DOLLARS	$184.86	$10,272.63	$119.30	$0.00	$3,905.28	$396.63	$585.84	$93.00	$24.03		$15,581.57

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2007

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $63.67	VIII $62.25	VII $49.60	VI $41.84	V $37.36	IV $30.36	III $27.20	II $24.02	I $16.55	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**21.00**	**0.00**	**30.50**	**40.00**	**4.00**	**11.00**	**51.00**	**16.00**	**0.75**	**174.25**	**$6,790.80**
01A - Draft Work Plan	0.00	0.00	1.00	14.50	1.50	11.00	51.00	0.50	0.75	80.25	$2,457.90
01B - Final Work Plan	21.00	0.00	29.50	25.50	2.50	0.00	0.00	15.50	0.00	94.00	$4,332.90
Task 2 - Remedial Investigation	**25.00**	**0.00**	**159.25**	**89.00**	**175.50**	**109.00**	**138.00**	**129.50**	**1.00**	**826.25**	**$29,960.97**
02.01 - Survey and Base Map Preparation	3.00	0.00	22.25	1.50	0.00	0.00	0.00	0.00	0.00	26.75	$1,357.37
02.02 - Existing Well Condition Survey	7.50	0.00	40.50	42.50	60.50	0.00	63.00	1.50	0.00	215.50	$8,274.44
02.03 - Direct Push Groundwater sampling	12.50	0.00	24.00	14.50	0.00	44.00	0.00	0.00	1.00	96.00	$3,945.35
02.04 - New Well Installation	2.00	0.00	56.00	30.50	115.00	65.00	75.00	128.00	0.00	471.50	$15,565.42
02.05 - Groundwater Sampling (2events)	0.00	0.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	15.50	$768.80
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	$49.60
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**25.50**	**3.50**	**0.00**	**14.00**	**0.00**	**12.00**	**0.00**	**55.00**	**$2,124.52**
03.01 - RI Report	0.00	0.00	25.50	3.50	0.00	14.00	0.00	12.00	0.00	55.00	$2,124.52
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
06.01 - Support	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	46.00	0.00	215.25	132.50	179.50	134.00	189.00	157.50	1.75	1055.50	
TOTAL LABOR DOLLARS	$2,928.82	$0.00	$10,676.40	$5,543.80	$6,706.12	$4,068.24	$5,140.80	$3,783.15	$28.96		$38,876.29

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2008

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $65.91	VIII $64.45	VII $51.04	VI $43.31	V $38.68	IV $31.43	III $28.16	II $24.87	I $17.13	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**4.50**	**0.00**	**104.75**	**163.00**	**227.00**	**55.25**	**415.00**	**495.00**	**0.00**	**1464.50**	**$47,216.48**
02.01 - Survey and Base Map Preparation	2.00	0.00	4.50	7.50	0.00	0.75	0.00	0.00	0.00	14.75	$709.90
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	15.50	0.00	0.00	0.00	0.00	0.00	15.50	$671.31
02.04 - New Well Installation	0.00	0.00	48.00	7.00	100.00	54.50	90.00	2.00	0.00	301.50	$10,918.17
02.05 - Groundwater Sampling (2events)	2.50	0.00	52.25	133.00	127.00	0.00	325.00	493.00	0.00	1132.75	$34,917.12
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**8.00**	**0.00**	**116.00**	**7.00**	**306.00**	**74.75**	**54.00**	**7.50**	**0.00**	**573.25**	**$22,643.73**
03.01 - RI Report	8.00	0.00	116.00	7.00	306.00	74.75	54.00	7.50	0.00	573.25	$22,643.73
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
06.01 - Support	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	12.50	0.00	220.75	170.00	533.00	130.00	469.00	502.50	0.00	2037.75	
TOTAL LABOR DOLLARS	$823.88	$0.00	$11,267.08	$7,362.70	$20,616.44	$4,085.90	$13,207.04	$12,497.18	$0.00		$69,860.21

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2009

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $67.04	VIII $65.55	VII $51.91	VI $44.05	V $39.34	IV $31.96	III $28.64	II $25.29	I $17.42	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**39.25**	**0.50**	**9.00**	**6.00**	**0.00**	**0.00**	**0.00**	**54.75**	**$2,605.31**
02.01 - Survey and Base Map Preparation	0.00	0.00	25.50	0.00	0.00	0.00	0.00	0.00	0.00	25.50	$1,323.71
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	$275.38
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	9.75	0.50	2.00	6.00	0.00	0.00	0.00	18.25	$798.59
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	$207.64
Task 3 - Remedial Investigation Report	**1.00**	**0.00**	**74.00**	**87.00**	**101.75**	**16.50**	**142.00**	**4.00**	**0.00**	**426.25**	**$16,438.96**
03.01 - RI Report	1.00	0.00	74.00	87.00	101.75	16.50	142.00	4.00	0.00	426.25	$16,438.96
Task 4 - Feasibility Study	**0.00**	**0.00**	**106.25**	**9.00**	**128.00**	**32.50**	**29.50**	**0.00**	**0.00**	**305.25**	**$12,830.99**
04.01 - Study	0.00	0.00	106.25	9.00	128.00	32.50	29.50	0.00	0.00	305.25	$12,830.99
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
06.01 - Support	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	1.00	0.00	219.50	96.50	238.75	55.00	171.50	4.00	0.00	786.25	
TOTAL LABOR DOLLARS	$67.04	$0.00	$11,394.25	$4,250.83	$9,392.43	$1,757.80	$4,911.76	$101.16	$0.00		$31,875.26

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2010

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $68.60	VIII $67.07	VII $53.11	VI $45.08	V $40.26	IV $32.71	III $29.31	II $25.86	I $17.83	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.50**	**0.00**	**0.00**	**0.00**	**0.00**	**17.25**	**0.00**	**0.00**	**17.75**	**$539.13**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	3.00	$87.93
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	14.25	0.00	0.00	14.25	$417.67
02.05 - Groundwater Sampling (2events)	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	$33.54
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**3.00**	**0.00**	**0.00**	**0.00**	**1.00**	**1.00**	**23.00**	**0.00**	**28.00**	**$858.01**
03.01 - RI Report	0.00	3.00	0.00	0.00	0.00	1.00	1.00	23.00	0.00	28.00	$858.01
Task 4 - Feasibility Study	**0.00**	**20.25**	**0.00**	**15.00**	**0.00**	**92.75**	**44.50**	**10.50**	**0.00**	**183.00**	**$6,644.05**
04.01 - Study	0.00	20.25	0.00	15.00	0.00	92.75	44.50	10.50	0.00	183.00	$6,644.05
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
06.01 - Support	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	0.00	23.75	0.00	15.00	0.00	93.75	62.75	33.50	0.00	228.75	
TOTAL LABOR DOLLARS	$0.00	$1,592.91	$0.00	$676.20	$0.00	$3,066.56	$1,839.20	$866.31	$0.00		$8,041.19

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2011

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $69.59	VIII $68.04	VII $53.89	VI $45.73	V $40.84	IV $33.18	III $29.73	II $26.25	I $18.09	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.50**	**0.00**	**0.00**	**0.00**	**0.50**	**$16.59**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.50	$16.59
Task 4 - Feasibility Study	**0.00**	**38.50**	**0.00**	**8.75**	**0.00**	**32.00**	**4.25**	**21.00**	**0.00**	**104.50**	**$4,759.04**
04.01 - Study	0.00	38.50	0.00	8.75	0.00	32.00	4.25	21.00	0.00	104.50	$4,759.04
Task 5 - EQUiS EDD	**0.00**	**6.00**	**5.00**	**3.00**	**0.00**	**52.00**	**2.50**	**0.00**	**0.00**	**68.50**	**$2,614.57**
05.01 - Initial Submission	0.00	4.00	4.00	2.00	0.00	40.00	2.00	0.00	0.00	52.00	$1,965.84
05.02 - Final Submission	0.00	2.00	1.00	1.00	0.00	12.00	0.50	0.00	0.00	16.50	$648.73
Task 6 - Additional PRAP	**0.00**	**7.00**	**0.00**	**5.00**	**0.00**	**13.00**	**6.00**	**0.00**	**0.00**	**31.00**	**$1,314.65**
06.01 - Support	0.00	7.00	0.00	5.00	0.00	13.00	6.00	0.00	0.00	31.00	$1,314.65
TOTAL LABOR HOURS	0.00	51.50	5.00	16.75	0.00	97.50	12.75	21.00	0.00	204.50	
TOTAL LABOR DOLLARS	$0.00	$3,504.06	$269.45	$765.98	$0.00	$3,235.05	$379.06	$551.25	$0.00		$8,704.85

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2012

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $71.68	VIII $70.08	VII $55.51	VI $47.10	V $42.07	IV $34.18	III $30.62	II $27.04	I $18.63	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.06 - Carney Street Well Field Aquifer test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 5 - EQUiS EDD	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
05.01 - Initial Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
05.02 - Final Submission	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 6 - Additional PRAP	**0.00**	**1.00**	**0.00**	**1.00**	**0.00**	**3.00**	**3.00**	**0.00**	**0.00**	**8.00**	**$311.58**
06.01 - Support	0.00	1.00	0.00	1.00	0.00	3.00	3.00	0.00	0.00	8.00	$311.58
TOTAL LABOR HOURS	0.00	1.00	0.00	1.00	0.00	3.00	3.00	0.00	0.00	8.00	
TOTAL LABOR DOLLARS	$0.00	$70.08	$0.00	$47.10	$0.00	$102.53	$91.87	$0.00	$0.00		$311.58

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(b-1)
DIRECT ADMINISTRATIVE LABOR HOURS BUDGETED

LABOR CLASSIFICATION Avg Labor rate 20106 - 2011	IX $65.61	VIII $64.15	VII $50.81	VI $43.12	V $38.50	IV $31.28	III $28.03	II $24.75	I $17.06	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**1.00**	**0.00**	**3.00**	**0.00**	**0.00**	**0.50**	**6.00**	**0.00**	**0.00**	**10.50**	**$401.84**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	1.00	0.00	3.00	0.00	0.00	0.50	6.00	0.00	0.00	10.50	$401.84
Task 2 - Remedial Investigation	**12.00**	**0.00**	**24.00**	**0.00**	**0.00**	**5.50**	**48.00**	**0.00**	**0.00**	**89.50**	**$3,524.06**
02.01 - Survey and Base Map Preparation	2.00	0.00	3.00	0.00	0.00	1.00	6.00	0.00	0.00	12.00	$483.09
02.02 - Existing Well Condition Survey	2.00	0.00	3.00	0.00	0.00	0.50	6.00	0.00	0.00	11.50	$0.00
02.03 - Direct Push Groundwater sampling	1.00	0.00	3.00	0.00	0.00	1.00	6.00	0.00	0.00	11.00	$0.00
02.04 - New Well Installation	2.00	0.00	3.00	0.00	0.00	0.50	6.00	0.00	0.00	11.50	$47.25
02.05 - Groundwater Sampling (2events)	2.00	0.00	6.00	0.00	0.00	1.50	12.00	0.00	0.00	21.50	$0.00
02.06 - Carney Street Well Field Aquifer test	3.00	0.00	6.00	0.00	0.00	1.00	12.00	0.00	0.00	22.00	$869.29
Task 3 - Remedial Investigation Report	**3.00**	**0.00**	**6.00**	**0.00**	**0.00**	**2.00**	**12.00**	**0.00**	**0.00**	**23.00**	**$900.57**
03.01 - RI Report	3.00	0.00	6.00	0.00	0.00	2.00	12.00	0.00	0.00	23.00	$900.57
Task 4 - Feasibility Study	**2.00**	**0.00**	**3.00**	**0.00**	**0.00**	**1.00**	**6.00**	**0.00**	**0.00**	**12.00**	**$483.09**
04.01 - Study	2.00	0.00	3.00	0.00	0.00	1.00	6.00	0.00	0.00	12.00	$483.09
Task 5 - EQUiS EDD	**0.00**	**0.00**	**8.00**	**0.00**	**0.00**	**2.00**	**16.00**	**0.00**	**0.00**	**26.00**	**$917.48**
05.01 - Initial Submission	0.00	0.00	4.00	0.00	0.00	2.00	8.00	0.00	0.00	14.00	$490.02
05.02 - Final Submission	0.00	0.00	4.00	0.00	0.00	0.00	8.00	0.00	0.00	12.00	$427.46
Task 6 - Additional PRAP	**0.00**	**0.00**	**4.00**	**0.00**	**0.00**	**2.00**	**8.00**	**0.00**	**0.00**	**14.00**	**$490.02**
06.01 - Support	0.00	0.00	4.00	0.00	0.00	2.00	8.00	0.00	0.00	14.00	$490.02
06.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	**18.00**	**0.00**	**48.00**	**0.00**	**0.00**	**13.00**	**96.00**	**0.00**	**0.00**	**175.00**	**$6,717.05**

Subject to contract allowability, project adminsitrative hours would include but not necessarily be limited to the following activites:

1. Work Plan Development
- Conflict of Interest Check
- Develop budget schedules and supporting documentation

2. Review work assignment (WA) progress
- Conduct progress reviews
- Prepare monthly project report and update WA progess schedule
- M/WBE Activities
- Program Management
- Manage Subcontracts

3. CAP Preparation
- Prepare monthly cost control report and CAP
- Oversee CAP preparation

4. Miscellaneous
- NSPE List Updates
- Equipment use and inventory
- Word Processing and Report Preparation

Contract/Project administration hours would not include activities such as:

1. QA/QC reviews
2. Technical oversight by management
3. Develop subcontracts
4. Work plan development (other than COI and budget preparation)
5. Review of deliverables

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(c)
DIRECT NON-SALARY COSTS

ITEM	MAXIMUM REIMBURSEMENT RATE	UNIT	ESTIMATED NUMBER OF UNITS	TOTAL ESTIMATED COST
In House Costs (ODC)				
TRAVEL: Mileage/Tolls/Lodging/Per Diem				
Task 1 - Work Plan Development				
01A - Draft Work Plan				
Mileage	$0.445	Actual	0	$0.00
Parking & Tolls	$25.00	Actual	0	$0.00
			Task 1 TTL	**$0.00**
Task 2 - Remedial Investigation				
02.02 - Existing Well Condition Survey				
Mileage	$0.445	per Mile	200	$89.00
Per Diem Meals	$64.00	Actual	0	$0.00
Lodging	$519.90	Actual	1	$519.90
Rental Van/Truck	$0.00	Actual	0	$0.00
Tolls, Parking, Misc	$414.05	Actual	1	$414.05
Cellphone	$0.80	per Min	0	$0.00
02.03 - Direct Push Groundwater sampling				
Mileage	$0.445	per Mile	150	$66.75
Per Diem Meals	$145.85	Actual	1	$145.85
Lodging	$375.00	Actual	1	$375.00
Rental Van/Truck	$0.00	Actual	0	$0.00
Tolls, Parking, Misc	$32.00	Actual	1	$32.00
Cellphone	$0.80	per Min	0	$0.00
02.04 - New Well Installation				
Mileage	$0.445	per Mile	1,800	$801.00
Per Diem Meals	$3,504.00	Actual	1	$3,504.00
Lodging	$6,249.45	Actual	1	$6,249.45
Rental Van/Truck	$334.06	Actual	1	$334.06
Tolls, Parking, Misc	$646.52	Actual	1	$646.52
Cellphone	$0.80	per Min	0	$0.00
02.05 - Groundwater Sampling (2events)				
Mileage	$0.445	per Mile	1,000	$445.00
Per Diem Meals	$3,568.00	Actual	1	$3,568.00
Lodging	$5,302.06	Actual	1	$5,302.06
Rental Van/Truck	$3,475.42	Actual	1	$3,475.42
Tolls, Parking, Misc	$759.65	Actual	1	$759.65
Cellphone	$0.80	per Min	0	$0.00
02.06 - Carney Street Well Field Aquifer test				
Mileage	$0.445	Actual	0	$0.00
Per Diem Meals	$64.00	Actual	0	$0.00
Lodging	$159.00	Actual	0	$0.00
Rental Van/Truck	$120.00	Actual	0	$0.00
Parking Tolls	$25.00	Actual	0	$0.00
Cellphone	$0.80	Actual	0	$0.00
			Task 2 TTL	**$26,727.71**
Task 3 - Remedial Investigation Report				
03.01 - RI Report				
Mileage	$0.445	Actual	0	$0.00
Per Diem Meals	$64.00	Actual	0	$0.00
Lodging	$159.00	Actual	0	$0.00
Parking Tolls	$25.00	Actual	0	$0.00
			Task 3 TTL	**$0.00**
Task 4 - Feasibility Study				
04.01 - Study				
Mileage	$0.445	Actual	0	$0.00
Per Diem Meals	$64.00	Actual	0	$0.00
Lodging	$159.00	Actual	0	$0.00
Parking Tolls	$25.00	Actual	0	$0.00
item	$0.00	Actual	0	$0.00
			Task 4 TTL	**$0.00**
			Direct Non-Salary Total	**$26,727.71**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(c2)
DIRECT NON-SALARY COSTS

ITEM	MAXIMUM REIMBURSEMENT RATE	UNIT	ESTIMATED NUMBER OF UNITS	TOTAL ESTIMATED COST
In House Costs (ODC)				
Shipping & Misc				
Task 1 - Work Plan Development				
01A - Draft Work Plan				
Shipping	$29.440	Actual	1	$29.44
Shipping	$6.120	Actual	1	$6.12
			Task 1 TTL	**$35.56**
Task 2 - Remedial Investigation				
02.02 - Existing Well Condition Survey				
Copies	$0.03	per Page	0	$0.00
Shipping (samples)	$0.00	Actual	0	$0.00
Miscellaneous Supplies (eg: ice bags)	$10.00	Actual	0	$0.00
LVE	$0.80	Actual	0	$0.00
PPE	$15.00	Actual	0	$0.00
02.03 - Direct Push Groundwater sampling				
Copies	$0.03	per Page	0	$0.00
Shipping (samples)	$54.10	Actual	1	$54.10
Miscellaneous Supplies (eg: ice bags)	$10.00	Actual	1	$10.00
LVE	$0.80	Actual	0	$0.00
PPE	$15.00	Actual	0	$0.00
02.04 - New Well Installation				
Copies	$0.03	per Page	0	$0.00
Shipping (samples)	$85.70	Actual	1	$85.70
Miscellaneous Supplies (eg: ice bags)	$10.00	Actual	1	$10.00
LVE	$0.80	Actual	0	$0.00
PPE	$15.00	Actual	0	$0.00
02.05 - Groundwater Sampling (2events)				
Copies	$0.03	per Page	0	$0.00
Shipping (samples)	$177.24	Actual	1	$177.24
Miscellaneous Supplies (eg: ice bags)	$30.00	Actual	1	$30.00
LVE	$0.80	Actual	0	$0.00
PPE	$15.00	Actual	0	$0.00
02.06 - Carney Street Well Field Aquifer test				
Copies	$0.03	per Page	0	$0.00
Shipping (samples)	$0.00	Actual	0	$0.00
Miscellaneous Supplies (eg: ice bags)	$200.00	Actual	0	$0.00
LVE	$0.80	Actual	0	$0.00
PPE	$15.00	Actual	0	$0.00
			Task 2 TTL	**$367.04**
Task 3 - Remedial Investigation Report				
03.01 - RI Report				
Shipping	$7.74	Actual	1	$7.74
Copies B&W 8.5X11	$0.03	per Page	0	$0.00
Copies B&W 11X17	$0.07	per Page	0	$0.00
Copies Color 8.5X11	$0.50	per Page	0	$0.00
Copies Color 11X17	$1.00	per Page	0	$0.00
Drawings B&W	$2.40	per Page	0	$0.00
Drawings Color	$13.50	per Page	0	$0.00
			Task 3 TTL	**$7.74**
Task 4 - Feasibility Study				
04.01 - Study				
Copies B&W 8.5X11	$0.03	per Page	0	$0.00
Copies B&W 11X17	$0.07	per Page	0	$0.00
Copies Color 8.5X11	$0.50	per Page	0	$0.00
Copies Color 11X17	$1.00	per Page	0	$0.00
Drawings B&W	$2.40	per Page	0	$0.00
Drawings Color	$13.50	per Page	0	$0.00
			Task 4 TTL	**$0.00**
			Direct Non-Salary Total	**$410.34**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(d)3
Vendor Rented Equipment

ITEM	ESTIMATED QUANTITY	UNIT	COST	TOTAL BUDGET COST
ODC				
Vendor Rented Equipment				
Task 2 - Remedial Investigation				
02.02 - Existing Well Condition Survey				
Water Level Indicater	0	per Day	35.00	$0.00
Oil-Water Interface probe	0	per Day	50.00	$0.00
Actual Cost	1	Actual	520.14	$520.14
02.03 - Direct Push Groundwater sampling				
Water Quality Meter	0	per Day	150.00	$0.00
Bladder Pump	0	per Day	200.00	$0.00
Water Level Indicator	0	per Day	35.00	$0.00
Actual Cost	1	Actual	543.56	$543.56
02.04 - New Well Installation				
Water Quality Meter	0	per Day	150.00	$0.00
Water Level Indicator	0	per Day	35.00	$0.00
Bladder Pump	0	per Day	200.00	$0.00
PID	0	per Day	125.00	$0.00
Port-A-John	0	per Day	100.00	$0.00
Rental Field trailer	0	Weeks	400.00	$0.00
Actual Cost	1	Actual	2,401.87	$2,401.87
02.05 - Groundwater Sampling (2events)				
Water Quality Meter	0	per Day	150.00	$0.00
Bladder Pump	0	per Day	200.00	$0.00
Water Level Indicator	0	per Day	35.00	$0.00
Port-A-John	0	Weeks	100.00	$0.00
Rental Field trailer	0	Weeks	400.00	$0.00
Actual Cost	1	Actual	24,966.51	$24,966.51
02.06 - Carney Street Well Field Aquifer test				
Water Quality Meter	0	per Day	150.00	$0.00
Bladder Pump	0	per Day	200.00	$0.00
Water Level Indicator	0	per Day	35.00	$0.00
Transducers/data loggers (5 unti)	0	per Day	75.00	$0.00
Port-A-John	0	Weeks	100.00	$0.00
Rental Field trailer	0	Weeks	400.00	$0.00
			Task 2 TTL	**$28,432.08**
			Vendor Rented Equpmnt Total	**$28,432.08**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(d)5
CONSUMABLE SUPPLIES

ITEM	ESTIMATED QUANTITY		UNIT COST	TOTAL BUDGET COST
ODCs Ice/Misc Field Supplies/Shipping				
Task 2 - Remedial Investigation				
02.03 - Direct Push Groundwater sampling				
Ziplock Bags	4	box	$0.99	$3.96
Towels, Paper	4	roll	$0.99	$3.96
Teflon Tubing	4	100ft/roll	$120.00	$480.00
Poly Tubing	0	100ft/roll	$30.00	$0.00
02.04 - New Well Installation				
Ziplock Bags	3	box	$0.99	$2.97
Towels, Paper	3	roll	$0.99	$2.97
Teflon Tubing	0	100ft/roll	$120.00	$0.00
Poly Tubing	0	100ft/roll	$30.00	$0.00
02.05 - Groundwater Sampling (2events)				
Ziplock Bags	60	box	$0.99	$59.40
Towels, Paper	20	roll	$0.99	$19.80
Teflon Tubing	139	100ft/roll	$120.00	$16,680.00
Poly Tubing	139	100ft/roll	$30.00	$4,170.00
Bladder Pump kits (poly)	16	10pak	$200.00	$3,200.00
02.06 - Carney Street Well Field Aquifer test				
Ziplock Bags	4	box	$0.99	$3.96
Towels, Paper	2	roll	$0.99	$1.98
Teflon Tubing	10	100ft/roll	$120.00	$1,200.00
Poly Tubing	10	100ft/roll	$30.00	$300.00
			TTL Task 2	**$26,129.00**
			Consumable Supplies Total	**$26,129.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

CostFixedFee Company Name
SCHEDULE 2.11(e)
COST-PLUS-FIXED-FEE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE
YEC, Inc	Design and Engineering	$45,209.26

A. Direct Salary Costs 2006 - 2009

Professional Responsibility Level	Labor Classification					Estimated No. of Hours	Total Estimated Direct Salary Cost
Title Here	NSPE IX					0.00	$0.00
Project Manager	NSPE VIII					5.00	$308.00
Title Here	NSPE VII					0.00	$0.00
Sr. Project Engineer/Geol.	NSPE VI					0.00	$0.00
Sen Geologist/Scientist	NSPE V					140.00	$5,847.80
Project Engineer/Geol.	NSPE IV					0.00	$0.00
Staff Geologist/Eng/CAD	NSPE III					24.00	$756.24
Technician II	NSPE II					110.00	$2,563.00
Technician I	NSPE I					110.00	$2,322.10
Total Direct Salary Costs						**389**	**$11,797.14**

B. Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 117% or the actual rate calculated in accordance with 48 CFR Federal Acquisition Regulation, whichever is lower.

Budget for indirect costs is **$13,802.65**

C. Maximum Reimbursement Rates for Direct Non-Salary Costs

Item		Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	Total Estimated Costs
Travel Costs					
Task 2 - Remedial Investigation					
02.01 - Survey and Base Map Preparation	**Equipment**	$654.50	event	1	$654.50
	Travel	$5,045.00	event	1	$5,045.00
	Additional Charges	$10,070.00	LS	1	$10,070.00
					$15,769.50
Total Direct Non-Salary Costs					$15,769.50

D. Fixed Fee (15%)

The fixed fee is **$3,839.97**

YEC
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2006

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $0.00	VIII $61.60	VII $0.00	VI $47.77	V $41.77	IV $36.28	III $31.51	II $23.30	I $21.11	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**5.00**	**0.00**	**0.00**	**140.00**	**0.00**	**24.00**	**110.00**	**110.00**	**389.00**	**$11,797.14**
02.01 - Survey and Base Map Preparation	0.00	5.00	0.00	0.00	140.00	0.00	24.00	110.00	110.00	389.00	$11,797.14
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	0.00	5.00	0.00	0.00	140.00	0.00	24.00	110.00	110.00	389.00	
TOTAL LABOR DOLLARS	$0.00	$308.00	$0.00	$0.00	$5,847.80	$0.00	$756.24	$2,563.00	$2,322.10		$11,797.14

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

YEC
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2007

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $0.00	VIII $0.00	VII $0.00	VI $0.00	V $0.00	IV $0.00	III $0.00	II $0.00	I $0.00	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL LABOR DOLLARS	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$0.00

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

YEC
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2008

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $0.00	VIII $0.00	VII $0.00	VI $0.00	V $0.00	IV $0.00	III $0.00	II $0.00	I $0.00	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL LABOR DOLLARS	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$0.00

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

YEC
NSPE
SCHEDULE 2.11(b)
DIRECT LABOR HOURS BUDGETED
2009

LABOR CLASSIFICATION AVERAGE RAW LABOR RATE	IX $0.00	VIII $0.00	VII $0.00	VI $0.00	V $0.00	IV $0.00	III $0.00	II $0.00	I $0.00	LABOR HOURS	DIRECT LABOR
Task 1 - Work Plan Development	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
01A - Draft Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
01B - Final Work Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 2 - Remedial Investigation	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
02.01 - Survey and Base Map Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.02 - Existing Well Condition Survey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.03 - Direct Push Groundwater sampling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.04 - New Well Installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
02.05 - Groundwater Sampling (2events)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 3 - Remedial Investigation Report	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
03.01 - RI Report	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
Task 4 - Feasibility Study	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**$0.00**
04.01 - Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
TOTAL LABOR HOURS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Mitkem (MBE)	**Analysis of Water Samples**	**$1,024.00**	**1**	**$21,305.00**

Item	Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	MWBE Mgmt Fee 5% Calculated		Validated	Total Estimated Costs
Task 2 - Remedial Investigation							
02.03 - Direct Push Groundwater sampling							
TCL VOC (8260B)	$85.00	per Sample	39	$165.75		$165.75	$3,315.00
02.04 - New Well Installation							
Waste Characterization	$1,100.00	LS	1	$55.00		$55.00	$1,100.00
02.05 - Groundwater Sampling (2events)							
TCL VOC (8260B)	$85.00	event	189	$803.25		$803.25	$16,065.00
02.06 - Carney Street Well Field Aquifer test							
TCL VOC (8260B)	$85.00	event	0	$0.00		$0.00	$0.00
					Total 02	**$1,024.00**	**$20,480.00**
Task 5 - EQUiS EDD							
05.01 - Initial Submission							
Retrieve Historical Data & Formatting	$75.00	per SDG	11	$0.00		$0.00	$825.00
					Total 05	**$0.00**	**$825.00**
Sub Con Mgmt Rules							
MWBE always 5%							
Others 5% only when >10,000			**Allowable Totals**			**$1,024.00**	**$21,305.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Enviroprobe	**Geophysical Survey / Utility Clearance**	**$0.00**	**0**	**$6,000.00**

Item	Maximum Reimbursement Rate (Specify Unit)	Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validated	Total Estimated Costs
Task 2 - Remedial Investigation					
02.04 - New Well Installation					
Mob/DeMob	$300.00 Lump Sum	1	$15.00	$0.00	$300.00
Utility Clearance (10 hour day)	$1,400.00 per Day	3	$210.00	$0.00	$4,200.00
Additional Time (hourly rate)	$200.00 per Hour	4	$40.00	$0.00	$800.00
Additonal expenses	$700.00 Lump Sum	1	$35.00	$0.00	$700.00
			Total 02	**$0.00**	**$6,000.00**
Sub Con Mgmt Rules					
MWBE always 5%					
Others 5% only when >10,000		**Allowable Totals**		**$0.00**	**$6,000.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Aquifer Drilling and Testing	**Direct Push Groundwater Sampling**	**$0.00**	**0**	**$6,262.00**

Item	Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validated	Total Estimated Costs
Task 2 - Remedial Investigation						
02.03 - Direct Push Groundwater sampling						
Mob/DeMob	$425.00	Lump Sum	1	$21.25	$0.00	$425.00
Geoprob rig and crew	$1,250.00	per Day	5	$312.50	$0.00	$6,250.00
Overtime (in excess of 8-hr/day)	$175.00	per Hour	6	$52.50	$0.00	$1,050.00
Sampling Equipment for each boring	$75.00	Each	3	$11.25	$0.00	$225.00
Grout boreholes	$1.50	Each	450	$33.75	$0.00	$675.00
Unused Budget	($2,363.00)	Lump Sum	1	($118.15)	$0.00	($2,363.00)
				Total 02	**$0.00**	**$6,262.00**
Sub Con Mgmt Rules						
MWBE always 5%						
Others 5% only when >10,000			**Allowable Totals**		**$0.00**	**$6,262.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Aztech Technologies (WBE)	**Hollow Stem Auger Drilling**	**$1,309.25**	**1**	**$26,185.00**

Item	Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	MWBE Mgmt Fee 5% Calculated		MWBE Mgmt Fee 5% Validated	Total Estimated Costs
Task 2 - Remedial Investigation							
02.04 - New Well Installation							
Mob/DeMob	$4,240.00	Lump Sum	1	$212.00		$212.00	$4,240.00
4 1/4 inch HSA.	$18.00	per Foot	560	$504.00		$504.00	$10,080.00
Split Spoon Samples	$30.00	Each	20	$30.00		$30.00	$600.00
Install 2-in PVC Sch. 40 Riser	$4.00	per Foot	490	$98.00		$98.00	$1,960.00
Install 2-in PVC Sch. 40 Screen	$5.00	per Foot	70	$17.50		$17.50	$350.00
Install filter pack for 2-in well	$6.00	per Foot	91	$27.30		$27.30	$546.00
Bentonite seal for 2-in well	$10.00	per Foot	7	$3.50		$3.50	$70.00
Grout annulus for 2-in well	$8.00	per Foot	462	$184.80		$184.80	$3,696.00
Install flushmount protective casing	$155.00	Each	7	$54.25		$54.25	$1,085.00
Well Development	$135.00	Hour	14	$94.50		$94.50	$1,890.00
Decontamination	$135.00	Hour	14	$94.50		$94.50	$1,890.00
New Drum	$48.00	Each	8	$19.20		$19.20	$384.00
Tyransport Drums to staging area	$55.00	Hour	14	$38.50		$38.50	$770.00
Skid steer rental	$1,040.00	Week	1	$52.00		$52.00	$1,040.00
Unused Budget	($2,416.00)	Lump Sum	1	($120.80)		($120.80)	($2,416.00)
					Total 02	**$1,309.25**	**$26,185.00**
Sub Con Mgmt Rules							
MWBE always 5%							
Others 5% only when >10,000			**Allowable Totals**			**$1,309.25**	**$26,185.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Delta Well & Pump (WBE)	**Monitoring Well (deep wells)**	**$6,952.90**	**1**	**$139,058.00**

Item	Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validated	Total Estimated Costs
Task 2 - Remedial Investigation						
02.04 - New Well Installation						
Mob/DeMob	$8,000.00	Lump Sum	1	$400.00	$400.00	$8,000.00
5 3/4 inch HSA	$43.00	per Foot	2260	$4,859.00	$4,859.00	$97,180.00
Split Spoon Samples	$60.00	Each	164	$492.00	$492.00	$9,840.00
Install 2-in PVC Sch. 80 Riser	$6.00	per Foot	2110	$633.00	$633.00	$12,660.00
Install 2-in PVC Sch. 80 Screen	$8.00	per Foot	150	$60.00	$60.00	$1,200.00
Install filter pack for 2-in well	$10.00	per Foot	195	$97.50	$97.50	$1,950.00
Bentonite seal for 2-in well	$50.00	per Foot	15	$37.50	$37.50	$750.00
Grout annulus for 2-in well	$7.00	per Foot	2050	$717.50	$717.50	$14,350.00
Install flushmount protective casing	$250.00	Each	15	$187.50	$187.50	$3,750.00
Well Development	$250.00	per Hour	30	$375.00	$375.00	$7,500.00
Decon pad construction	$1,200.00	Lump Sum	1	$60.00	$60.00	$1,200.00
Decontamination	$200.00	per Hour	30	$300.00	$300.00	$6,000.00
New drum	$60.00	Each	12	$36.00	$36.00	$720.00
Transport drums to staging area	$200.00	per Hour	30	$300.00	$300.00	$6,000.00
Unused Budget	($33,542.00)	Lump Sum	1	($1,677.10)	($1,677.10)	($33,542.00)
02.05 - Groundwater Sampling (2events)						
Downhole Geophysics	$1,500.00	LS	1	$75.00	$75.00	$1,500.00
02.06 - Carney Street Well Field Aquifer test						
item	$0.00	event	0	$0.00	$0.00	$0.00
				Total 02	**$6,952.90**	**$139,058.00**
Sub Con Mgmt Rules						
MWBE always 5%						
Others 5% only when >10,000			**Allowable Totals**		**$6,952.90**	**$139,058.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Nancy Potak (WBE)	**Data Validation**	**$171.60**	**1**	**$3,432.00**

Item	Maximum Reimbursement Rate (Specify Unit)	Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validated	Total Estimated Costs
Task 2 - Remedial Investigation					
02.03 - Direct Push Groundwater sampling					
VOCs	$11.00 Unit rate	66	$36.30	$36.30	$726.00
02.05 - Groundwater Sampling (2events)					
VOCs	$11.00 Unit rate	246	$135.30	$135.30	$2,706.00
02.06 - Carney Street Well Field Aquifer test					
VOCs	$11.00 Unit rate	0	$0.00	$0.00	$0.00
			Total 02	**$171.60**	**$3,432.00**
Sub Con Mgmt Rules					
MWBE always 5%					
Others 5% only when >10,000		**Allowable Totals**		**$171.60**	**$3,432.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
American Waste Management	**Drill Cutting Disposal**	**$0.00**	**0**	**$8,612.00**

Item	Maximum Reimbursement Rate (Specify Unit)		Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validate	Total Estimated Costs
Task 2 - Remedial Investigation						
02.01 - Survey and Base Map Preparation						
item	$0.00	event	0	$0.00	$0.00	$0.00
02.02 - Existing Well Condition Survey						
item	$0.00	event	0	$0.00	$0.00	$0.00
02.03 - Direct Push Groundwater sampling						
item	$0.00	event	0	$0.00	$0.00	$0.00
02.04 - New Well Installation						
Drill Cutting Disposal	$12,000.00	Lump Sum	1	$600.00	$0.00	$12,000.00
Unused Budget	($3,388.00)	Lump Sum	1	($169.40)	$0.00	($3,388.00)
				Total 02	**$0.00**	**$8,612.00**
Sub Con Mgmt Rules						
MWBE always 5%						
Others 5% only when >10,000			**Allowable Totals**		**$0.00**	**$8,612.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

AECOM Technical Services Northeast, Inc
SCHEDULE 2.11(f)
UNIT PRICE SUBCONTRACTS

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	MWBE Mgmt Fee	MWBE Flag (Y=1, N=0)	SUBCONTRACT PRICE
Capital Environmental Services	**Waste Removal**	**$0.00**	**0**	**$2,959.00**

Item	Maximum Reimbursement Rate (Specify Unit)	Estimated No. of Units	MWBE Mgmt Fee 5% Calculated	Validate	Total Estimated Costs
Task 2 - Remedial Investigation					
02.04 - New Well Installation					
Waste Removal	$2,959.00 LS	1	$147.95	$0.00	$2,959.00
			Total 02	**$0.00**	**$2,959.00**
Sub Con Mgmt Rules					
MWBE always 5%					
Others 5% only when >10,000		**Allowable Totals**		**$0.00**	**$2,959.00**

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast,
Site ID No: 1-30-009, 1-30-053B
Site Name: Photocircuits/Pall Corp

Date Prepared: 10/25/11

SCHEDULE 2.11(g) - Supplemental
MONTHLY COST CONTROL REPORT
SUBCONTRACTS

	Subcontractor Name	A Subcontract Costs Claimed This Period	B Subcontract Costs Claimed Previously	C Total Subcontract To Date (A+B)	D Subcontract Approved Budget	E Management Fee Budget	F Management Fee Paid and Claimed	G Total Costs To Date (C+F)	
1	Mitkem (MBE)				$21,305.00	$1,024.00	$0.00	$0.00	
2	Enviroprobe				$6,000.00	$0.00	$0.00	$0.00	
3	Aquifer Drilling and Testing				$6,262.00	$0.00	$0.00	$0.00	
4	Aztech Technologies (WBE)				$26,185.00	$1,309.25	$0.00	$0.00	
5	Delta Well & Pump (WBE)				$139,058.00	$6,952.90	$0.00	$0.00	
6	Nancy Potak (WBE)				$3,432.00	$171.60	$0.00	$0.00	
7	American Waste Management				$8,612.00	$0.00	$0.00	$0.00	
8	Capital Environmental Services				$2,959.00	$0.00	$0.00	$0.00	
9	YEC, Inc				$45,209.26	$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
						$0.00	$0.00	$0.00	
	TOTALS	**$0.00**	**$0.00**	**$0.00**	**$259,022.26**	**$9,457.75**	**$0.00**	**$0.00**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Total Assignment

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$173,250.93	
2 Indirect Costs							$254,332.38	
3 Subtotal Direct Salary Costs and Indirect Costs							$427,583.31	
4 Travel							$26,727.71	
5 Other Non-Salary Costs							$54,971.42	
6 Subtotal Direct Non-Salary Costs							$81,699.13	
7 Subcontractors							$259,022.26	
8 Total Work Assignment Cost							$768,304.70	
9 Fixed Fee							$44,896.25	
9A Subcon. Mgmt. Fee							$9,457.75	
10 Total Work Assignment Price							**$822,658.70**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 1 - Work Plan Development

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$22,372.37	
2 Indirect Costs							$32,842.64	
3 Subtotal Direct Salary Costs and Indirect Costs							$55,215.01	
4 Travel							$0.00	
5 Other Non-Salary Costs							$35.56	
6 Subtotal Direct Non-Salary Costs							$35.56	
7 Subcontractors							$0.00	
8 Total Work Assignment Cost							$55,250.57	
9 Fixed Fee							$5,797.58	
9A Subcon. Mgmt. Fee							$0.00	
10 Total Work Assignment Price							**$61,048.15**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 2 - Remedial Investigation

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$80,321.90	
2 Indirect Costs							$117,912.55	
3 Subtotal Direct Salary Costs and Indirect Costs							$198,234.45	
4 Travel							$26,727.71	
5 Other Non-Salary Costs							$54,928.12	
6 Subtotal Direct Non-Salary Costs							$81,655.83	
7 Subcontractors							$258,197.26	
8 Total Work Assignment Cost							$538,087.54	
9 Fixed Fee							$20,814.61	
9A Subcon. Mgmt. Fee							$9,457.75	
10 Total Work Assignment Price							**$568,359.90**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 3 - Remedial Investigation Report

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$42,081.80	
2 Indirect Costs							$61,776.09	
3 Subtotal Direct Salary Costs and Indirect Costs							$103,857.89	
4 Travel							$0.00	
5 Other Non-Salary Costs							$7.74	
6 Subtotal Direct Non-Salary Costs							$7.74	
7 Subcontractors							$0.00	
8 Total Work Assignment Cost							$103,865.63	
9 Fixed Fee							$10,905.08	
9A Subcon. Mgmt. Fee							$0.00	
10 Total Work Assignment Price							**$114,770.71**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 4 - Feasibility Study

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$24,234.07	
2 Indirect Costs							$35,575.62	
3 Subtotal Direct Salary Costs and Indirect Costs							$59,809.69	
4 Travel							$0.00	
5 Other Non-Salary Costs							$0.00	
6 Subtotal Direct Non-Salary Costs							$0.00	
7 Subcontractors							$0.00	
8 Total Work Assignment Cost							$59,809.69	
9 Fixed Fee							$6,280.02	
9A Subcon. Mgmt. Fee							$0.00	
10 Total Work Assignment Price							**$66,089.71**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 5 - EQUiS EDD

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$2,614.57	
2 Indirect Costs							$3,838.18	
3 Subtotal Direct Salary Costs and Indirect Costs							$6,452.75	
4 Travel							$0.00	
5 Other Non-Salary Costs							$0.00	
6 Subtotal Direct Non-Salary Costs							$0.00	
7 Subcontractors							$825.00	
8 Total Work Assignment Cost							$7,277.75	
9 Fixed Fee							$677.54	
9A Subcon. Mgmt. Fee							$0.00	
10 Total Work Assignment Price							**$7,955.29**	

Project Manager (Engineer) _____ Date _____

Work Assignment No: D004436-04.1
Engineer: AECOM Technical Services Northeast, Inc.
Site ID No: 1-30-009, 1-30-053B

Site Name: Photocircuits/Pall Corp
Project No: 60135725
Date Prepared: 10/25/11

SCHEDULE 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Task 6 - Additional PRAP

Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+C)	E Estimated Costs To Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1 Direct Salary Costs							$1,626.23	
2 Indirect Costs							$2,387.30	
3 Subtotal Direct Salary Costs and Indirect Costs							$4,013.53	
4 Travel							$0.00	
5 Other Non-Salary Costs							$0.00	
6 Subtotal Direct Non-Salary Costs							$0.00	
7 Subcontractors							$0.00	
8 Total Work Assignment Cost							$4,013.53	
9 Fixed Fee							$421.42	
9A Subcon. Mgmt. Fee							$0.00	
10 Total Work Assignment Price							**$4,434.95**	

Project Manager (Engineer) _____ Date _____

Cost Review for Schedule 2.11 Package

Contractor Name: AECOM Technical Services Northeast, Inc. **Date: 09/23/11**

WA # and Name: #D004436-04.1 Photocircuits/Pall OU2 RI/FS **Reviewer: Underhill, TomaEisele**

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	A complete set of 2.11 Schedules (a) through (h) is attached.	X		
	Budget package includes a cover letter and an M/WBE Utilization Plan.			Will be submitted
1	**Cover Letter**			
	Provides brief justification of the budget supported by the 2.11s.	X		
	Anticipated completion date(s) for the work are included. For amendments, there is an explanation of how the submittal affects the existing schedule.	X		
	Duration of anticipated work does not exceed the next fiscal year. (Work subsequent to that should be part of a future amendment or new work assignment.)	X		
	If proposing work for multiple years, a brief justification is included.			NA
	Includes anticipated billings by State fiscal year. For amendments, both the unexpended budget and the new costs being added are identified.			NA
	If an amendment, the current status of work (what's completed/billed, what remains) is provided.	X		
2	**Schedule 2.11(b) - Direct Labor**			
	Average reimbursement rates are used for each year. Future years escalate 3%.	X		
	Hours are segregated by year.	X		
	Total cost for each NSPE level is shown.	X		
	Total direct labor costs match amounts on Schedule 2.11(a).	X		
	The Principal's (NSPE IX) labor hours charged to WA are less than 2% of the total.	X		
	Total labor hours match hours on Schedule 2.11(h).	X		
3	**Schedule 2.11(b-1) - Direct Administrative Labor Hours**			
	Breakdown of Schedule 2.11(b-1) is reasonable, i.e., admin LOE is within acceptable guideline of <4% of overall WA LOE. Justification is attached for any exceedance.	X		
4	**Schedules 2.11(c) and (d) - Direct Non-Salary Costs**			
	Rates listed in Schedule 2.11(c) are consistent with contract.	X		
	Rates for in-house and/or misc. costs match contract Schedule 2.10(b) or 2.10(c) (2).	X		
	Quotes are included for any non-contract item (<u>including</u> equipment purchases & rentals; <u>excluding</u> air fare) >$1k. If sufficient number of quotes are unavailable, an engineer's estimate must be provided. The low quote has been selected.			NA, no new subs for the remainder of this WA
	All costs are allowable, e.g., office telephone and office shipping cannot be reimbursed as a direct cost if they're included in ICR. Field costs must be receipted.	X		
	Appropriate lodging/per diem/mileage rates are used.			NA
	Schedule 2.11(d)1 - All equipment purchased is supported by cost justification that's acceptable to the CM. Equipment is to be maintained by the contractor or turned over to DEC, and it must be added to contractor's inventory list (include a revised copy).			NA
	Schedule 2.11(d)2 - Rates for consultant-owned equipment match Schedule 2.10(c).			NA
	Schedule 2.11(d)4 - Includes equipment to be used only on the WA (such as blower purchased to upgrade SVE system).			NA
	Other direct costs (no. of field days, lodging, and field equipment usage) are reasonable based on field work schedule or supporting documentation.			NA
	Total of direct non-salary costs matches the amount on Schedule 2.11(a).	X		

5	**Schedule 2.11(e) - Cost-plus-fixed-fee subcontracts**			
	Proposed subconsultant is on standby or has DEC-approved rates with another standby consultant. Otherwise, financial information required for cost analysis must be submitted.			NA
	Standby subcontract is active and rates (salary, direct and indirect costs, and fixed fee) match contract rates.			NA
	A breakdown of direct non-salary costs is provided.	X		
	Total subcontract cost matches amount on Schedule 2.11(a).			NA
	Subcontractor has justified/obtained adequate quotes for any further subcontracted work.			NA
	Subcontractor certification(s) have been submitted.			No new subs
6	**Schedule 2.11(f) - Unit Price Subcontracts**			
	There are quotes for non-standby subcontracts >$1k. Bids are comparable (quantities and items) and provide unit costs plus job total. If sufficient number of quotes are unavailable, an engineer's estimate must be provided. The low quote has been selected.			NA
	Standby Drillers (Two phase process) - Quotes from all standbys are attached. Proper unit costs and mobilization/demobilization costs are used. The low quote has been selected. Explanation for declinations has been provided.			NA
	Standby Labs and Data Validators (rotate use) - Unit costs match those in contract(s).			NA
	M/WBE - Cost reasonableness of sole/single source M/WBE contracts <$10k are documented by an engineer's estimate.			NA
	Cost reasonableness of sole/single source contracts are documented by an engineer's estimate or other cost comparisons (e.g., historical costs, pricing guides).			Described in letter
	Placeholders are used only for non-standby subcontractors.			NA
	Cost reasonableness of placeholder subcontractors are documented by an engineer's estimate or other cost comparisons.			NA
	Correct contract management fee is calculated only on non-professional unit priced subs >$10k and M/WBE firms from $1. (Management fee is not allowed on professional engineering firms, architects, or surveyors unless the contract specifically allows it.)			NA
	Total subcontract costs match the amounts on Schedule 2.11(a).	X		
	Justification is attached for subcontracts >$100,000 supporting a determination not to design and competitively bid the work. Response-type activities (drum removals, other construction-type activities) must be competitively bid unless otherwise approved.			NA
	Subcontractor certification(s) have been submitted.			No new subs
7	**Schedule 2.11(g) - Cost Control Report**			
	Individual 2.11(g)s equal Summary 2.11(g) and costs match those on 2.11(a).	X		
8	**Schedule 2.11(g) - Supplemental - Cost Control Report (subs)**			
	Includes all applicable subcontracts and management fees (for unit price only).	X		
9	**Schedule 2.11(a)**			
	Rates for indirect and fixed fee match contract rates.	X		
	All numbers rolled up into Schedule 2.11(a) add up.	X		

S 10527

PROJECT NAME: Photocircuits/Pall Corp	WA #: D004436-4

TO: Dale A. Desnoyers

The attached Work Plan is submitted for your approval. It has been checked and approved by:

	Name	*Initials*	*Date*
Project Manager (scope, level-of-effort, subcontracting).	Joseph Jones	JJ	2/27/07
Contract Manager/Cost Reviewer (conformance with contract, protocols, and cost reasonableness).	Patty Kappeller	PLK	2/27/07
M/WBE Unit	Brenda Moulhem	BM	2/28/07
Chief, Contracts and Payments Section	Mike Cruden	[illegible]	3/1/07
T. Wolosen, Fiscal Management Section	Tim Wolosen	[illegible]	3/5/07
Bureau Director	Donna Weigel	[illegible]	3/6/07
Assistant Division Director	Sal Ervolina	[illegible]	3/6/07

PLEASE CALL THERESA COUSER AT 2-9764 AFTER SIGN-OFF

Please note we will split the WP amt/encumberance 50%/50% as well as every payment per Sal's direction

FEB 27 2007

P. Kappeller

New York State Department of Environmental Conservation
Division of Environmental Remediation, 12th Floor
625 Broadway, Albany, New York 12233-7011
Phone: (518) 402-9706 • **FAX:** (518) 402-9020
Website: www.dec.state.ny.us

MAR - 6 2007

Mr. Mike Thiagaram
Earth Tech Northeast, Inc.
300 Broadacres Drive
Bloomfield, NY 07003

RE: **Work Plan Approval/Notice-to-Proceed**
Work Assignment #D004436-04
Photocircuits/Pall Corp
Site #130009, #130053B

Dear Mr. Thiagaram:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) approves the work plan dated November 2006 for the above-referenced project in the amount of $800,994.36. The subject work plan is to conduct a Remedial Investigation and Feasibility Study for deep groundwater (60 feet below ground surface [ft bgs] or deeper) at the Photocircuits Corporation and Pall Corporation sites in Nassau County.

DER authorizes your firm to proceed with the scope of work in this WA's approved work plan. All work should be completed in accordance with the schedule in the approved work plan.

If you have any questions or comments, please contact Mr. Joseph Jones, Project Manager, at (518) 402-9621.

Sincerely,

for Dale A. Desnoyers
Director
Division of Environmental Remediation

Enclosure

ec: w/ enclosure
J. Jones, PM
P. Kappeller, CM

ec: w/o enclosure
D. Desnoyers
D. Weigel
C. Vasudevan
G. Bobersky
M. Cruden
S. Gupta
B. Moulhem
T. Wolosen

EarthTech
A tyco International Ltd. Company

300 Broadacres Drive
Bloomfield, NJ
07003

P 973.338.6680
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www.earthtech.com

January 25, 2007

Mr. Joseph Jones
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233

Re: Investigation/Design Standby Contract
Work Assignment #D004436-4
Photocircuits Corp., OU2, Site #130009
Pall Corp., OU2, Site #130053B

Dear Mr. Jones:

As we discussed earlier this week, Earth Tech Northeast, Inc. (Earth Tech) is providing this letter to document the level of effort associated with the preparation of draft work plans for the Photocircuits/Pall Corporation Deep Groundwater OU 2 RI/FS. The level of effort exceeded that initially budgeted by NYSDEC for a variety of reasons, including:

- The site, as defined, encompasses three listed inactive hazardous waste sites; plus two other facilities (the Glen Cove Carney Street Wellfield and the August Thomsen site) for which documents needed to be reviewed. This effort also included identifying the location of and acquiring documentation not available through NYSDEC and scattered throughout various firms and agencies.
- Issues related to scoping the pump test included obtaining and assessing previous test reports and identifying appropriate disposal of pump test water.
- Establishing an accurate comprehensive list of monitoring wells, including relevant information including owner, location, depth, and accessibility.
- Identifying and planning to resolve technical issues (including the extent if any of artesian conditions in the aquifer and the effectiveness of the existing hydraulic control system at Photocircuits), which often included competing or contradictory claims by the representatives of the responsible parties. In a similar vein, due to the scrutiny likely to be paid to project documents by the responsible parties (including both engineers and attorneys), a high level of defensibility is necessary.

More detail on each of these items is presented in the paragraphs below, including our estimate of the level of effort (i.e., hours expended by Earth Tech personnel) for each.

1. Document Acquisition and Review

Document review necessary for plan preparation for this project involved significantly more effort than a 'typical' hazardous waste site, as the site as defined encompasses three listed NYSDEC sites (Photocircuits, Site 1-30-009; Pall Corp, Site 1-30-053A; and Pass and Seymour, Site ID 1-30-0053B). In addition to documentation associated with these three listed sites, all of which are part of the OU 2 RI/FS, Earth Tech also needed to acquire and review reports associated with the Carney Street Wellfield, which is under the jurisdiction of the Glen Cove Department of Public Works. A partial list of documents obtained and reviewed (over 40 documents) for the draft plans was provided in Section 7.0 of the draft Work Plan (mailed to NYSDEC on November 22). A more comprehensive list (also including documents

which had been requested but not yet received when the Work Plan went to print) is provided as Attachment A to this letter.

Several additional complicating factors are posed by the fact that this RI/FS is in effect a multi-site investigation. As suggested in the discussion above, relevant project documents are scattered among many different parties. Although Earth Tech's initial file review at NYSDEC offices did yield a significant number of documents, it was evident that there were other important documents which were not available through NYSDEC (including some documents specifically identified as relevant in the NYSDEC scope of work) which Earth Tech had to locate and acquire independently. While some sources were cooperative (for example, the representative for Photocircuits, engineering firm [Andy Barber of B&L]) and provided useful information readily, the process was less productive or at least more labor-intensive for others. For example, Earth Tech had to file formal Freedom of Information Law (FOIL) requests with Nassau County in order to obtain documents in their possession (e.g., the 1998 Nassau County groundwater study and the Contaminated Aquifer Segment report).

We note that in the draft plans prepared by a previous consultant (D&B, 2006) a "File Review" subtask was included in Task 2 (as Subtask 2A), and was scoped for 58 professional hours. (Note that the D&B plans, there is an error in the spreadsheets in that the hours and costs allocated to the NSPE-I geologist do not appear in the summary at the bottom of the 2.11 Forms; the sum for the file review subtask 2A is erroneously shown as 34 hours.) Earth Tech performed this file review as part of Task 1, as it is considered imperative to incorporate as much of the available information as possible into the planning stage (note that there are no 'file review' hours in our budget in Task 2). As noted above and as can be seen from the list of documents provided in the attachment to this letter, the file (document) review for this site was (and continues to be) a major effort. We estimate that this effort involved about 40 hours for acquiring documents (including internet document searches, telephone calls to numerous agencies and individuals, preparation of formal request including FOIL requests to Nassau County) and about 120 hours to review and summarize the documents (in some cases, revisiting documents several times to re-focus on issues or claims raised in subsequent documents).

2. Pumping (Aquifer) Test for Carney Street Well No. 21.

A significant investment of time was associated with scoping the pumping test on Carney Street Well No. 21. This pump test was included in the scope of work provided by NYSDEC, and Earth Tech concurs with the need to perform this test if in fact there is to be serious consideration given to bringing this well back into service. However, the scope of work (based apparently on plans prepared by another consultant) was insufficiently detailed to provide a meaningful road map for implementing the pump test, and for disposal of the water generated as part of the test. Documentation provided to Earth Tech indicated that there had been a previous pump test performed in 2000, but no copies of the report associated with that test were provided. Obtaining information regarding the previous pump test was important both to assess the appropriate scope for the test to be performed as part of this RI. In addition, disposal of the pump test water is a significant item; at the reported pumping rate of 1400 gpm, approximately 2,000,000 gallons of water will be generated per day. The previous plans stated that the "pumped water is assumed to be discharged to the Glen Cove sewer system as was reportedly done during previous investigations." Despite contacting the Glen Cove DPW and the consultant who performed the test, we have been unable to verify that the water from the previous test was discharged to the sewer, and one person contacted thought it might have been discharged to Glen Cove Creek. Earth Tech did ultimately acquire a copy of the report "Engineer's Report Prepared for City of Glen Cove on the Removal of Organic Compounds at Carney Street Well No. 21", Sidney B. Bowne & Son, LLP, November 2000; however, disposition of the

pump test water is not addressed in the report. In any case, and especially in view of the county-wide stormwater management plan adopted in Nassau County in 2003, it is uncertain that either of these options would be permissible under current regulations. If there is not a relatively convenient and inexpensive way of disposing the pump test water, then the cost of the pump test becomes prohibitive and the need to conduct the test would have to be re-evaluated, or significant modifications would have to be considered. Since Earth Tech did not want to prepare plans with unwarranted assumptions (e.g., with regard to the disposal of the water) which have a potential critical impact on the implementation of the plans, we felt it was necessary to pursue this issue prior to presenting the plans to NYSDEC. (Note that the issue of disposal of the pump test water was not yet resolved at the time the plans were submitted; and due to the fact that Task 1A was already over budget, resolving this has been deferred to Task 1B, Final Plans.)

Significant senior level technical review was associated with the evaluation and preparation of the pump (aquifer) test task, above and beyond the general document acquisition identified in item 1 (above). This included a re-evaluation of the proposed scope identified in NYSDEC's August 15, 2006 Work Assignment letter and attempting to resolve the issue of pump test water disposal, an issue that was not addressed adequately in prior documents. This included contacts with individuals and departments and review of documents not directly related to the final RI/FS but necessary for implementation of the aquifer test (e.g., the Nassau County Storm Water Management Program [2003] and the most recent available Nassau County Storm Water Management Program – 2005 Annual Report [2005]). We estimate the level of effort for this item to be about 50 hours.

3. Compiling a Comprehensive List of Extant Monitoring Wells

Another issue related to the level of effort associated with this work plan was getting a definitive list of the monitoring wells in the project area that existed and that might be candidates for sampling. While there was a list of wells included in the NYSDEC scope of work, Earth Tech determined that there were inconsistencies and omissions in this list (some of which were discussed in our September 6 memorandum to Mr. Jones of NYSDEC). In addition to determining where the wells are and who controls them (i.e., from whom we need to get the well key in order perform the initial evaluation and subsequent sampling), additional logistical issues are raised by the fact that about three of the well clusters scheduled for sampling are in the middle of Sea Cliff Avenue, a relatively busy street (separating the Pall Corp and Photocircuits sites) in Glen Cove. These wells were apparently installed and previously sampled by Pall Corp.'s consultant, Apex; however, Apex has not yet returned our call regarding permission and procedures (e.g., is a street closure permit necessary; with which city agencies is coordination/permission necessary) for accessing these wells. (This will also be resolved as part of finalizing the Task 1B work plans.) We also determined (in part based on the site visit conducted in September) that there are more wells in some areas (e.g., the northern part of the Pall Corp Site) and that reasonably accurate information regarding the monitoring wells is necessary so that the correct wells get sampled and the correct identification is assigned (especially important for consistency with previous data and reports). We have also coordinated with the Nassau County DPW and Nassau County Department of Health in identifying wells in the project area (some of which are scheduled to be sampled; and others in the vicinity which are not planned for sampling as part of this RI/FS but for which boring logs and analytical data are available; information which will be useful for both assessing contaminant transport and geological conditions.)

We estimate the level of effort associated with this item (tabulating existing data; identifying anomalies and data gaps; identifying the wells and well owners; acquiring the additional information; and updating the existing well summary information [see QAPP Table 1]) to be about 40 hours. (As noted on QAPP Table 2, it will still be necessary to resolve some of the anomalies during the well condition survey performed as part of Task 2.)

4. Additional Technical Considerations

One other factor which increased the level of effort associated with these plans was the more than usual need for technical defensibility of the plans (and the subsequent work upon which the plans are based). As there are two potential responsible parties (PRPs; Pall Corp and Photocircuits) with vested, and opposing, interests, it is likely that the plans and reports associated with this investigation will be subject to more than the usual level of scrutiny. In addition, the City of Glen Cove, which is apparently also interested in restoring Carney Street Well No. 21 to service, will likely also be taking a hard look at the plans and reports associated with this project.

In addition to the items discussed previously in this letter, Earth Tech also spent time reviewing (and in some cases performing additional research) associated with the following issues:

- The effectiveness of the existing hydraulic barrier; and also its affect (or lack thereof) on the groundwater and contaminant flow in the deep (greater than 60 ft below ground surface [bgs]) aquifer. We noted that this issue was raised by several commenters on the NYSDEC PRAP and the Pall Corp OU-1 ROD.
- Assessing the presence and extent (if present) of artesian conditions at the site (as has been claimed for the Pall Corp site); the effect of these conditions on groundwater and contaminant migration; and designing an investigation taking this potential into account.
- Researching and reviewing available information on other known contaminated sites in the area, especially those upgradient of Photocircuits. (This was done to evaluate a suggestion by attorneys for both Pall and Photocircuits that regional contamination may be present and as such it is premature for a ROD or deep groundwater investigation.) The results of this work (not explicitly provided in the plans) indicate that there is no available information suggesting that there are upgradient sources of contamination relevant to this RI/FS.
- Reviewing the usefulness of performing downhole gamma logging for the project. After consideration and review, including discussions with geophysical survey firms who perform this work, Earth Tech has concluded that downhole gamma logging would not be cost-effective and has recommended eliminating this item from the scope.
- The need for groundwater modeling was also reviewed. (Groundwater modeling was not included in the NYSDEC scope of work, but Earth Tech considered it important to evaluate if this option would be appropriate for this site.) Based on our review of the available groundwater transport information (including review of the modeling performed as part of the Pall Corp RI [Enviro-Science, July 2000; Appendix G]). Earth Tech did not recommend adding groundwater modeling to the existing scope but leaves open the possibility of recommending modeling at a later date (e.g., if there are issues related groundwater flow after review of the first round of groundwater sampling and elevation readings conducted in Task 2).

We estimate a total of 60 hours was needed to address the issues listed in the bullets above for this item (item 4).

Summary

The total LOE for items 1 through 4 above is about 310 hours. Earth Tech's overall estimate for Task 1A was 380 technical hours (420 hours total) for Task 1A (draft plans), leaving 70 hours for the more generic effort of assembling the information into the required plans, creating presentable tables and figures, developing budgets and costs for the four RI/FS tasks, and the like. On this basis, given the complexity and technical level of difficulty associated with this project, we feel that the Task 1A budget presented in the Work Plan is reasonable.

We appreciate your attention to this matter. Should you have any questions or require additional information, please do not hesitate to contact Mike Thiagaram or me at 973-338-6680.

Very truly yours,

Earth Tech Northeast, Inc.

Allen Burton
Project Manager

Enclosure

ATTACHMENT A
SOURCES OBTAINED AND REVIEWED FOR PHOTOCIRCUITS/PALL CORP DEEP GROUNDWATER OU2 WORK PLANS

Apex Companies, Inc. (Apex), 2005. Project Status Report [update of Phase II Pilot Test Injections of Fenton's Reagent at former Pall Corp facility]. July 20.

Apex, 2006a. Issues Impacting Remediation Approach, Pall Corporation. Printout of slides presented at meeting. April 13.

Apex, 2006b. In-Situ Chemical Oxidation Phase II Pilot Test and Source Evaluation Report. May 31.

August Thomsen, web site accessed October 2006 at http://www.atecousa.com.

Barton & Loguidice, P.C. 2000. Work Plan 2000 for Remedial Investigation (RI) Completion, Interim Remedial Measure (IRM) Implementation & Feasibility Study (FS). 31 & 45 Sea Cliff Ave Sites, Photocircuits Corp. March.

Barton & Loguidice, P.C., 2002a. Remedial Design, Groundwater Hydraulic Control System, Revision 1. 31 & 45 Sea Cliff Ave Sites, Photocircuits Corp. July.

Barton & Loguidice, P.C., 2002b. Second and Third Quarter 2002 Progress Report. (cover letter to NYSDEC dated October 15) October.

Barton & Loguidice, P.C., 2004. Third Quarter 2004 Progress Report. 31 & 45 Sea Cliff Ave Sites, Photocircuits Corp. November 29.

Barton and Loguidice, Andy Barber, personal communication, November 2006. Request for information on monitoring wells and extraction wells on Photocircuits and former Pass and Seymour properties. (Boring logs received November 17, 2006.)

Bond, Schoeneck, & King, PLLC, 2004. Letter from Virginia C Robbins to Rosalie Rusinko, Esq. (NYSDEC Division of Environmental Enforcement [DEE]). Re: Filing of Order on Consent for Pall Corporation (Index # W1-0831-04-01).

Bond, Schoeneck, & King, PLLC, 2006. Letter from Virginia C Robbins to Rosalie Rusinko, Esq. (NYSDEC DEE). Re: Request for meeting; claims artesian groundwater effect has moved contamination from Photocircuits onto Pall site. January 3.

Dvirka and Bartilucci (D&B), 2006. Photocircuits/Pall Corp Deep Groundwater OU2 RI/FS Draft Work Plan. March.

Enviro-Sciences, 1999. Supplemental Work Plan for RI/FS, Pall Corporation (revised based on NYSDEC telephone comments July 14). July 16.

Enviro-Sciences, Inc. 2000 (July 13). Phase II Remedial Investigation Report (3 Volumes) – Pall Corporation, 30 Sea Cliff Avenue, Glen Cove NY. (Prepared for Pall Corp and NYSDEC).

Enviro-Sciences, Inc. 2001a (October 15). Feasibility Study Report – Pall Corporation, 30 Sea Cliff Avenue, Glen Cove NY. (Prepared for Pall Corp [c/o Maupin, Taylor & Ellis] and NYSDEC).

Enviro-Sciences, Inc. 2001b (October 31). Pilot Test Work Plan – In-Situ Chemical Oxidation: Permanganate Injection, Pall Corporation, 30 Sea Cliff Avenue, Glen Cove, NY. Prepared for

Pall Corporation and NYSDEC Bureau of Eastern Remedial Action, Division of Environmental Remediation. (Referenced Treatability Study, Appendix A, and NYSDOH CAMP, Appendix B, not included in copy reviewed.)

Enviro-Sciences, 2002. Revised In-Situ Pilot Test Design, Pall Corporation. July 31.

Enviro-Sciences, 2003a. Final In-Situ Chemical Oxidation Phase I Pilot Test Report (Pall Corporation). October 17.

Enviro-Sciences, Inc. 2003b. Letter from Daniel Smith to Jeffrey Dyber (NYSDEC) re: issuance of a ROD for the Pall site is premature at this time. November 11.

Glen Cove, NY. Web Site – City Departments and Phone Numbers. Accessed at http://glencove-li.com/index.asp

Glen Cove, City of, 2004. Letter from Nicholas DeSantis (Director of Public Works) to Jeffrey Dyber (NYSDEC) transmitting the City's comments on the Record of Decision for the Pall Corp Site OU-1.

Glen Cove, City of, 2005. Letter from Mr. Nick DeSantis (Director of Public Works) to Mr. Chittibabu Vasudevan, May 6. Re: Request for NYSDEC assistance in evaluating proposal to re-use Carney Street Well #21 for Photocircuits process water needs.

Glen Cove Department of Public Works, Water Department. Angelo Martino, personal communications (telephone conversations), various, October 27 through November 14, 2006.

Glen Cover Chamber of Commerce, 2004. Letter from Beth Dresller, president, to Jeffrey Dyber, NYSDEC. Re: Opposition to issuance of a Record of Decision. March 24.

H2M Group, 1992. Source Area Investigation – Sea Cliff Industrial Area, Glen Cove, New York. Prepared for Crowell & Moring, Washington DC. September.

Howard, Glenn T., PhD, 2004. Personal letter to Jeffrey Dyber, NYSDEC. Re: Objection to issuance of ROD. (Letter undated; received by NYSDEC March 30.)

IT Group, 1999. Phase II RI/FS Work Plan (2/99) and QAPP (1/99), Pall Corp.

McLaren/Hart, Inc., 1998. Remedial Investigation Report, 31 and 45A Sea Cliff Avenue Sites, Photocircuits Corporation, Glen Cove, NY. Prepared for Photocircuits. September 28.

McLaren/Hart Environmental Services East, P.C. 1999. Results Report – Pilot Study of Air Sparging/Soil Vapor Extraction at Photocircuits Corporation. July 26.

Middleton, Kontokosta Associates Ltd (MKA). 1996. Phase I Environmental Site Assessment, 45 Sea Cliff Avenue, Glen Cove, New York. April.

Nassau County Department of Public Works (DPW), 1990. Investigation of Contaminated Aquifer Segment, City of Glen Cove, Nassau County, New York. Volumes I and II. June.

Nassau County DPW, Division of Sanitation and Water Supply, Hazardous Waste Services Unit. 1994 (March). Preliminary Site Assessment – Sea Cliff Avenue Industrial Area, Town of Oyster Bay (Site No. 130053). Prepared for NYSDEC.

Nassau County DPW, 1998. Nassau County 1998 Groundwater Study. Prepared by Camp Dresser & McKee.

Nassau County Commissioner of Public Works, 2003. Nassau County Storm Water Management Program.

Nassau County DPW; Excel Spreadsheet received November 8, 2006; information on six Nassau County Groundwater Monitoring Wells provided in response to Earth Tech FOIL request.

Nassau County DPW, web site – Stormwater management plan; general permit GP-02-02.

Nassau County Commissioner of Public Works, 2005a. Nassau County Storm Water Management Program – 2005 Annual Report.

Nassau County DPW, 2005b. Groundwater Monitoring 2000-2003 With Historical Information. Report downloaded from Nassau County website, September 2006.

Nassau County DPW, Stormwater Management Program. 2006. Personal communication (phone conversation) with Mr. Jerry Ennis [sp?], November 15. Asked for protocol for discharge to Glen Cove Creek (for proposed pump test).

Nassau County DPW (Richard Liebe), 2006. Boring logs for six monitoring wells installed by DPW in Glen Cove between 1940 and 1990. Received November 30 (cover letter dated November 17).

Nassau County Department of Health (DOH), Bureau of Environmental Protection web site. Water system monitoring program 2001-2002.

Nassau County DOH, Drinking Water. Personal Communication (Mr. Joe DiFranco), October - November, 2006.

Nassau County DPW, Mr. Peter Witkowski. Personal communications, October 2006 and November follow-up; also Freedom of Information Law request for background reports prepared by NC DPW and well information.

New York State Department of Environmental Conservation (NYSDEC), 1990. Primary and Principal Aquifer Determinations. Technical and Operations Guidance Series 2.1.3. October.

NYSDEC, Division of Environmental Remediation, 1999. Registry of Inactive Hazardous Waste Disposal Sites in New York State. Volume 1 – List of Sites in Nassau County and Suffolk County. Joint Report of NYSDEC and NYSDOH. Scanned hard copy accessed through New York State Library at Albany website.

NYSDEC, Division of Environmental Remediation, 2001. Registry of Inactive Hazardous Waste Disposal Sites in New York State. Volume 1 – List of Sites in Nassau County and Suffolk County. Joint Report of NYSDEC and NYSDOH. April. (Hard copy.)

NYSDEC, 2004a. Proposed Remedial Action Plan (PRAP), Pall Corporation Site, Operable Unit 1, Surface and Shallow Subsurface Contamination. Prepared by NYSDEC Division of Environmental Remediation. February.

NYSDEC, 2004b. Record of Decision, Pall Corporation Site, Operable Unit 1 – Surface and Shallow Subsurface Contamination. Site Number 1-30-053B. Prepared by Division of Environmental Remediation. March.

NYSDEC, 2005. Letter from Rosalie Robbins, Esq. (NYSDEC Division of Environmental Enforcement [DEE] to Virginia Robbins, Esq. (Bond, Shoeneck & King). Re: Pall Corp's

declining to sign the Order on Consent; NYSDEC position regarding necessity of comprehensive groundwater (OU2) investigation, and its performance using State Superfund monies. March 10.

NYSDEC, 2006a. Letter from Jeffrey Dyber to Mr. Farsan Fotouhi (Pall Corporation) re: overflowing groundwater well observed January 18 at Pall Corp. site. January 30.

NYSDEC, 2006b. Letter from Jeffrey Dyber to Daniel Smith (Apex Environmental) re: measures to be taken regarding contaminated groundwater surfacing at Pall Corp. site. March 10.

NYSDEC, 2006c. Letter from Jeffrey Dyber to Daniel Smith (Apex Environmental) re: NYSDEC disapproval of the "In-Situ Chemical Evaluation Phase II Pilot Test . . . Report" dated May 31, 2006. July 31.

NYSDEC, 2006d. Work Assignment D004436-04 Authorization letter and Scope of work for Photocircuits/Pall Corp OU2. August 15.

NYSDEC, Environmental Site Remediation Site Database Search. www.dec.state.ny.us/cfmx/extapps/derfoil/has/rezults.cfm Accessed various times, September through November, 2006.

NYSDEC Environmental Site Remediation Database. Accessed November, 2006 at http://www.dec.state.ny.us/cfmx/extapps/derfoil/index.cfm?pageid=3

New York State Department of Health (NYSDOH), 2004a. Letter Re: Pall Corporation Site – Comments on January 11 2006 OU-1 Limited Off-site Investigation Work Plan. March 7.

NYSDOH, 2004b. Letter Re: Air Sampling Results at Glen Cove Child Day Care Facility. March 9.

NYSDOH. 2004c. Letter from Gary Litwin to Mr. Dale Desnoyers, NYSDEC re: concurrence with protectiveness of actions specified in ROD. March 31.

NYSDOH, 2004d. Letter from Rebecca Mitchell to Jeffrey Dyber (NYSDEC) re: comments on January 2004 Pilot Test Work Plan Addendum for Pall Corporation. April 12.

NYSDOH, 2006. Letter from Rebecca Mitchell to Jeffrey Dyber (NYSDEC) re: overflowing monitoring well at Pall Corp site. February 28.

Pall Corporation, 2004. Letter Hyman Katz to Jeffrey Dyber (NYSDEC) re: comments on the PRAP and NYSDEC Fact Sheet, Operable Unit 1, Pall Corp. March 26.

Pall Corporation, 2006. Letter from Mr. Farsan Fotouhi to Jeffrey Dyber, NYSDEC. Re: steps taken at Pall in response to NYSDEC letter of January 30. February 1.

Pennington, Mark C. (Counsel to Photocircuits) and Kurt Olsen (Counsel to Pall Corporation), 2004. Letter to Rosalie Rusinko, Esq. (Senior Attorney, NYSDEC Division of Environmental Enforcement). Re: reservations about performing a groundwater investigation at this time. January 9.

Printed Circuit Design and Manufacture, August 2006. "More Changes at Photocircuits", page 10; "The PCB [Printed Circuit Board] Melting Pot", page 30.

Photocircuits home page (accessed at www.photocircuits.com, October 2006)

Sidney B. Bowne Group, Mr. Paul Stevens; referred to Mr. Joe Todaro. Personal communication (telephone conversation) November 6, 2006 and email with analytical data for three samples collected during pumping test of Carney Street Well No. 21 between January 20 and 28, 2000.

Sidney B. Bowne & Son, LLP. 2000. Engineer's Report Prepared for City of Glen Cove on the Removal of Organic Compounds at Carney Street Well No. 21. Prepared for City of Glen Cove. November.

TAMS Consultants Inc. (TAMS) and GZA, 1998. Work Plan; Quality Assurance Project Plan; Field Activities Plan, Health and Safety Plan for focused RI/FS; Pall Corp site (under contract D003060 for NYSDEC). January and February.

TAMS/GZA, 1999. Focused Remedial Investigation Report, Pall Corp.

Terra Systems, Inc. August 27, 2004. June 2004 Status Report, Photocircuits Accelerated Anaerobic Bioremediation Project.

Wikipedia, 2006. "Glen Cove, New York." Accessed November, 14 2006 at http://en.wikipedia.org/wiki/Glen_Cove,_New_York.

From: Donna Weigel
To: Gupta, Swapan; Wolosen, Tim
Date: 8/16/2006 6:07:06 PM
Subject: Fwd: Re: Pall Corporation and Photocircuitss Corporation Sites

I thought I explained this to you after I talked to Sal. Sal said at the end we will assume the costs should be split 50/50 for cost recovery purposes.

>>> Swapan Gupta 08/16/06 4:27 PM >>>
Hi Tim:
This is what I received from Sal when I had asked him about issuing two separate WAs or budgets. Let me know if there is a problem.
-Swapan

>>> Sal Ervolina 08/04/06 2:11 PM >>>
I had talked to Donna about this. Because there is a co-mingled off-site plume originating from both sites, there is no easy way to separate the costs. I gave my approval to issue one WA for the two sites.

>>> Swapan Gupta 08/04/06 12:27 PM >>>
Hi Sal:
On 12/12/05 you had approved a conceptual approval memo for RI at both these sites for $540,000 to be combined as one WA. It was assigned to Dvirka & Bartilucci but due to delays we have to reassign to another consultant because the D&B contract expires in October and there is insufficient time to complete the work.
I have been instructed by Donna that we should only be issuing multisite WAs for SC and SM work and not RI/FS or RD work.
Given what your decision has been in recent past about not combining work elements and sites, I want to assure myself that I am not doing anything contrary to established procedures if I issue this WA to a new standby consultant as one WA rather than two WAs.
I plan to perform a COI with potential firms but I would appreciate your decision in this matter before I issue the WA as a multisite.
Thank you.
-Swapan

CC: Burger, Ralph; Ervolina, Sal; Zeppetelli, Laura

From: Swapan Gupta
To: Tim Wolosen
Date: 8/16/2006 4:27:50 PM
Subject: Fwd: Re: Pall Corporation and Photocircuitss Corporation Sites

Hi Tim:
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-Swapan

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Thank you.
-Swapan

CC: Donna Weigel; Ralph Burger

From: Tim Wolosen
To: Ralph Burger; Swapan Gupta
Date: 8/16/2006 3:30:46 PM
Subject: Re: Issuance of Photocircuits/Pall Corps., OU2 Work Assignment #4436-4

Just a reminder, as Work Assignment this has 2 sites, the Work Assignment budget will need to be broken down to identify the amount on money assigned to each site before I can put the money up on Cert.

Thank you.

>>> Ralph Burger 08/16/06 2:15 PM >>>
Attached is a new work assignment. Please sign and return. Hard copy to follow.

From: Sal Ervolina
To: Vasudevan, Chittibabu
Date: 9/16/2005 5:22:28 PM
Subject: Re: Photocircuits Corporation, Site No. 130009 and Pall Corporation, Site No. 130053B, Conceptual Approv

I approve the conceptual approval memo for an OU2 RI/FS at the Photocircuits Corporation and Pall Corporation sites.

>>> Chittibabu Vasudevan 9/7/2005 12:52:48 PM >>>
Hi Sal: The attached file represents a conceptual approval memorandum to conduct the OU2 remedial investigation for these sites the Remedial Investigation for deep groundwater (60 ft bgs or deeper) at the Photocircuits Corporation and Pall Corporation sites. This site is located above a sole source aquifer, and up gradient of the closed Carney St. well field.

The estimated budget is $540,000 with $15,000 for work plan development.

Thanks

Chittibabu Vasudevan, Ph.D.,P.E.("Vasu")
Director, Remedial Bureau A
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7015
Phone: (518) 402-9625
Fax: (518) 402-9627
e-mail: cxvasude@gw.dec.state.ny.us

CC: Bobersky, Guy; Haggerty, Elizabeth; Jones, Joseph; Norvik, Dottie; Parish, Walter; Weigel, Donna; Wolosen, Tim; Zeppetelli, Laura

New York State Department of Environmental Conservation

MEMORANDUM

To: **File**
From: Patricia Kappeller, Contract Manager, CPS, BPM, DER
Subject: Review of Cost Sections for EarthTech Work Assignment **#D004436-04** Final Work Plan for the Photo/Pall Corp OU#2 Site

Date: February 23, 2007

I have reviewed the cost sections for the above referenced WA. The cost sections appear to be reasonable and satisfactorily completed. The following checklist outlines the review process and review comments. Please see me if you have any questions.

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	Are the costs for Task 1 and the total WA within the budget on the Conceptual Approval?	X		
	Is there a complete set of 2.11 Schedules (a) through (h)?	X		
1.	**Schedule 2.11(a)**			
	Do rates for indirect costs and fixed-fee match contract rates? (Are sliding rates applicable?)	X		
	Do numbers add up?	X		
2.	**Schedule 2.11(b) - Direct Labor Hours**			
	Are average reimbursement rates used for each year? (Check rates in contract vs. time period of WA.)	X		
	Are hours segregated by year?	X		
	Is total cost for each NSPE level shown?	X		
	Does total direct labor costs match amount on Schedule 2.11(a)?	X		
	Do total hours match hours on Schedule 2.11(h)?	X		
	Is the Principal's (NSPE level 9) time less than 2% of total time?	X		
3.	**Schedule 2.11(b-1) - Direct Administrative Labor Hours**			
	Is breakdown of Schedule 2.11(b-1) reasonable (i.e. within the acceptable guidelines of 4% administrative hours and 2% for Principal, both out of total project hours)? If not, did Consultant submit acceptable justification?	X		
4.	**Schedules 2.11©) and (d) - Direct Non-Salary**			
	Are rates listed in Schedule 2.11©) consistent with contract?	X		
	Are rates for in-house and/or miscellaneous costs in their contract (Schedule 2.10(b))? If not, are quotes included for any item (<u>including</u> equipment purchases & rentals; <u>excluding</u> air fare) >$1k? (For estimated cost, not unit cost.)	X		
	Are there any unallowable costs? (e.g. Telephone and shipping cannot be reimbursed as a direct cost if included in ICR; if an item is not in ICR, it should be on 2.10(b) or 2.10©).)		X	
	Are appropriate lodging/per diem rates used?	X		
	Are rates approved for consultant-owned equipment (Schedule 2.10©))?			N/A
	Does total direct non-salary costs match amount on Schedule 2.11(a)?	X		

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	Are other direct costs (# of travel days, lodging, and field equipment usage) reasonable based on field work schedule or supporting documentation from consultant? (Ask PM)	X		
5.	**Schedule 2.11(e) - Cost-plus-fixed-fee subcontracts** (typically don't need quotes)			
	Is proposed subconsultant on standby? If not, does proposed subconsultant have DEC approved rates with another standby consultant?	X		
	Is subconsultant contract active and do rates (direct salary costs, indirect costs, direct non-salary costs, and fixed-fee) match?	X		
	Is there a breakdown of direct non-salary costs (i.e. are additional Sch. 2.11's needed)?	X		
	Does total subcontract amount match Schedule 2.11(a)?	X		
	Has subcontractor justified/obtained adequate quotes for any further subcontracted work?	X		
6.	**Schedule 2.11(f) - Unit Price Subcontracts** (aka per diem, lump sum)			
	Are proposed subcontractors on standby? If not, are there quotes for subcontracts >$1k? Bids should be comparable (quantities and items) and provide unit costs plus job total.	X		
	Standby Drillers (Two-step process) - Are costs from at least 3 standbys compared? If not, an additional quote from a non-standby driller may be needed. Are proper unit costs and mob/demob costs used?	X		
	Standby Lab and Data Validators (Used on a rotational basis) - Do unit cost per sample match unit cost in standby contract?	X		
	Other - Standard solicitation rules (quotes) apply for services >$1k.	X		
	M/WBE - Are sole-source M/WBE contracts <$5k and cost-reasonableness documented?	X		
	Is management fee calculated only on non-professional unit priced subs >$10k? Appropriate rate? (Fee cannot be calculated on professional engineers, architects, or surveyors.)	X		
7.	**Schedule 2.11(g) - Cost Control Report**			
	Do individual 2.11(g)s equal the summary 2.11(g) and do those costs match 2.11(a)?	X		
8.	**Supplemental 2.11(g) - Cost Control Report (subs)**			
	Do schedules include all applicable subcontracts and management fee? (Unit price only.)	X		
9.	**Schedule 2.11(h) - Summary of Labor Hours**			
	Do hours on 2.11(h) match those on 2.11(b)?	X		
10	**Supplemental Supporting Cost Information**			
	Has additional cost info. been supplied which has not been incorporated into WA budget documentation? List: **** Subcontractor Quotes: Need 3 quotes from standby subcontractors. Need 5 quotes, if subcontractors are not standby.** ****For amendments to work assignments, please refer to requirements of Article 5(b) when changing the Fixed Fee. Additionally, the Fixed Fee should not be changed for any rebudget (only for amendments where the percent change of (add specific percentage) is triggered)**			

From: Joseph Jones
To: Kappeller, Patricia
Date: 11/30/2006 3:03:09 PM
Subject: Fwd: Photocircuits - short term fiscal issues

>>> "Burton, Allen" <Allen.Burton@earthtech.com> 11/29/06 4:16 PM >>>
Joe -

Since we haven't had much luck being by the phone at the same time, I thought I would try to put in writing the two short-term issues I wanted to discuss.

1 - Aerial photography. We are in the best time of year for doing the overflight (leaves are gone and snow hasn't come). We realize that the work plans we submitted and the associated budget will take some time for NYSDEC to review and for us to come to a final "meeting of the minds" on both the technical scope and a final budget. By that time, we could have three feet of snow, rendering the interpretation of the photography difficult or impossible. Therefore, we would ask that NYSDEC review the mapping requirements, concur that an overflight is necessary, and authorize (but not obligate) us to spend the $3700 to perform the subcontracted overflight (this would be by a subcontractor to our subcontractor, YEC). We would acknowledge that we wouldn't be able to invoice NYSDEC for this work until after the final budget is approved; but just that this item will find its way into that budget.

2 - Work Plan preparation budget. As you by now have no doubt noticed, our budget for the work plans is higher (quite a bit higher) than the original $15,000 authorized in the August 15 letter; the amount shown for that Task 1A (draft plans) represents the actual amount we've spent through November 17. Earth Tech policy is that we're not supposed to work without a budget (i.e., when we reached $15,000 I was supposed to have gotten some sort of authorization to proceed). While in my previous experience (back when we were TAMS Consultants), it was accepted (though discouraged) that NSYDEC was a reasonable client and would usually ultimately authorize reasonable expenditures incurred, even if prior authorization had not been obtained. However, Earth Tech, as part of a publicly-traded company, has more stringent rules and the bottom line is that I shouldn't have gone over the budget without approval; and now my management is concerned that I have expended close to $25,000 over budget (and counting; I'm still committed to getting the plans done [at least as long as I still have a job], including the HASP and also including tracking down some of the loose ends in terms of the background and logistics information we'll need) and that we won't get it back. So what my management is looking for is some sort of acknowledgement that the money we've spent so far will ultimately be reimbursed, although we are obviously aware that project managers (on your end and mine) do not have the authority to authorize money. If it

would help our cause, I can prepare a memo explaining why the complexity of this project warrants more time and money than the 'standard' RI work plan budget.

Oh, and by the way my boss's boss is looking for this by December 1.

Obviously we'll still need to talk but I though I'd use this opportunity to explain in greater detail than a voice-mail message what the short-term issues are.

Thanks for any help you can provide on either of these items,

Allen

EarthTech
A tyco International Ltd. Company

40 British American Blvd.
Latham, NY
12110

P 518.951.2200
F 518.951.2300
www.earthtech.com

August 11, 2006

Mr. Ralph Burger, Contracts Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Contracts Section, Room 1224
625 Broadway, 12th Floor
Albany, New York 12233-7012

Subject: **Conflict of Interest Check**
Photociruits Corporation (1-30-006) and Pall Corporation (1-30-053)

Dear Mr. Burger:

Per your request, we have reviewed our firm's contractual status with the potentially responsible parties (PRPs) that the Department has indicated are associated with the referenced sites and find no conflict of interest. We have attached the completed conflict of interest certification with this correspondence.

We appreciate your consideration of Earth Tech in this matter. Please feel free to contact me at (518) 951-2341 or Mike Thiagaram at (973) 338-6680 if you have any questions.

Sincerely,

Earth Tech Northeast, Inc.

Helen H. Mongillo
Program Manager, NYSDEC Standby Contract

cc: Mike Thiagaram, PE
Mike Spera, PE

Conflict of Interest Certification

The undersigned, representing **Earth Tech Northeast Inc.**, hereby certifies for the **Photocircuits Corporation and Pall Corporation:**

1) That I have been informed by the New York State Department of Environmental Conservation who the known potentially responsible parties are for the subject sites, and

2) That to the best of my knowledge, **Earth Tech Northeast Inc..** and the employees of the firm to be assigned to this project have no conflict of interest with the work proposed at these sites, and

3) That **Earth Tech Northeast Inc.** presently has no contracts with, nor imminent prospects of contracts with, potentially responsible parties associated with the above-named sites, and

4) That **Earth Tech Northeast Inc.** has no responsibilities to potentially responsible parties associated with the above-named sites.

Earth Tech Northeast Inc. also agrees to be bound by provisions of Appendix B, Section II of the Standby Contract between the Department and **Earth Tech Northeast Inc. (Contract #D004436).**

Certified By:

Helen Mongillo Helen Mongillo, P.G.

Signature of Consultant

Earth Tech Northeast, Inc.

Consulting Firm

8/11/06

Date

From: Ralph Burger
To: helen.mongillo@earthtech.com
Subject: COI Check Photo. Corp. & Pall Corp.

Attached is a conflict of interest check for two sites which may be issued as one work assignment. Hard copy to follow. Thanks.

CC: Bobersky, Guy; Gupta, Swapan; Jones, Joseph; Lewis, Lisa

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Room 1224
625 Broadway, Albany, New York 12233-7012
Phone: (518) 402-9764 • **FAX:** (518) 402-9722
Website: www.dec.state.ny.us

Denise M. Sheehan
Acting
Commissioner

August 4, 2006

Ms. Helen Mongillo
Earth Tech
40 British American Boulevard
Latham, New York 12110

Dear Ms. Mongillo:

Re: Remedial Investigation Work Assignment for **OU 2 of the Photocircuits Corporation** (Site #1-30-009) **and Pall Corporation** (Site #1-30-053B)

The Department is contemplating issuing a work assignment for the above-referenced sites. The following are, to the best of our knowledge, the known potentially responsible parties (PRPs):

– Photocircuits Corporation, 31 Sea Cliff Ave., Glen Cove, NY

– Pall Corporation, 30-36 Sea Cliff Ave., Glen Cove, NY

– Pass and Seymour Site, formerly known as Slater Electric (Site #1-30-053A), 45 Sea Cliff Ave., Glen Cove, NY

Please review your firm's contractual status with the above PRP(s), sign the enclosed **Conflict of Interest Certification** and return it to me within five (5) working days of receipt of this letter. If you have any questions, I can be reached by phone at (518-402-9752) or by e-mail at (reburger@gw.dec.state.ny.us).

Sincerely,

Ralph E. Burger
Contract Manager
Division of Environmental Remediation

Enclosure
ec: J. Jones
G. Bobersky
S. Gupta
L. Lewis

Conflict of Interest Certification

The undersigned, representing **Earth Tech Northeast Inc.**, hereby certifies for the **Photocircuits Corporation and Pall Corporation:**

1) That I have been informed by the New York State Department of Environmental Conservation who the known potentially responsible parties are for the subject sites, and

2) That to the best of my knowledge, **Earth Tech Northeast Inc..** and the employees of the firm to be assigned to this project have no conflict of interest with the work proposed at these sites, and

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Earth Tech Northeast Inc. also agrees to be bound by provisions of Appendix B, Section II of the Standby Contract between the Department and **Earth Tech Northeast Inc. (Contract #D004436).**

Certified By:

_____

Signature of Consultant

_____

Consulting Firm

_____

Date

From: Guy Bobersky
To: Swapan Gupta
Date: 8/4/2006 4:27:50 PM
Subject: Standby Contract Work Assignment: Pall/Photocircuits

Swapan,

The attached file must be included with the work assignment I sent earlier today to make it complete. I've copied Ralph Burger as it looks like he will be the Contract Manager - if not, please forward to the appropriate individual. Thanks.

CC: Joseph Jones; Ralph Burger

New York State Department of Health
Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

P:\BEEI\Bureau\Common\CAMP\GCAMPR1.DOC

Ralph

EarthTech
A tyco International Ltd. Company

300 Broadacres Drive
Bloomfield, NJ
07003

P 973.338.6680
F 973.338.1052
www.earthtech.com

August 22, 2006

Mr. Swapan Gupta
Acting Chief
Contracts and Payments Section
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Contracts Section, Room 1224
625 Broadway, 12th Floor
Albany, New York 12233-7012

Subject: Investigation/Design Standby Contract
Work Assignment # D004436-4
Photocircuits Corp, OU2, Site #130009
Pall Corp., OU2, Site #130053B

Dear Mr. Gupta:

As requested, returned herewith is a signed copy of your August 15th letter acknowledging receipt of Work Assignment # D004436-4.

We appreciate your consideration of Earth Tech for this assignment.

Sincerely,

Earth Tech Northeast, Inc.

Joann Davoli for

Mike Thiagaram, PE
Program Manager
NYSDEC Standby Contract

Enclosure (a/s)
cc: M. Spera, PE
H. Mongillo

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Room 1224
625 Broadway, Albany, New York 12233-7012
Phone: (518) 402-9764 • **FAX:** (518) 402-9722
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

Mr. Mike Thiagaram, PE
EarthTech Northeast, Inc.
300 Broadacres Drive
Bloomfield, N.J. 07003

August 15, 2006

RE: Investigation/Design Standby Contract
Work Assignment # D004436-4
Photocircuits Corp, OU2, Site #130009
Pall Corp., OU2, Site #130053B

Dear Mr. Thiagaram:

Enclosed is a copy of a Work Assignment (WA) for the above referenced project. Please acknowledge receipt by returning a signed copy of this letter to me within one week.

This WA has been identified by an alpha-numeric designation denoting EarthTech Northeast contract number and sequential number of this WA. Although this letter authorizes the expenditure of Work Plan Development Cost funds, these funds will not be available for payment until the Office of the State Comptroller (OSC) encumbers monies for this WA (generally this takes four weeks).

Project Name:	Photocircuits/Pall Corps., OU2
W.A. Number:	D004436-4
Site Number:	130009 and 130053B
Program Element:	Remedial Investigation/Feasibility Study
NYSDEC Project Manager:	Joseph Jones
Phone Number:	(518) 402-9613

Work Plan Development Cost Authorization (Task 1):	$ 15,000
Estimated Work Assignment Budget (Tasks2 -4):	$ 505,000
Total Estimated Work Assignment Budget (All Tasks):	$ 520,000

Also enclosed is a copy of the work plan development schedule. All efforts should be made to adhere to it. Final work plans and budgets are to be developed so that a Notice to Proceed can be issued within a maximum of 90 days. Failure to do so may result in termination of this WA and may affect your firm's receipt of future work assignments.

A work plan submitted to the Department should include the following items:

1. **Description of major tasks and subtasks.**

2. **Detailed work assignment progress schedule with milestones.**

3. **Identification of areas of work requiring subcontracting**.

4. **A detailed work assignment budget** broken down by tasks and subtasks (using schedule 2.11 in the contract) in accordance with the contract's budget reporting requirements, utilizing cost rates and factors contained in the base contract (see Article 4 of contract), applied to the approved level-of-efforts. Schedule 2.11(b) must include all labor hours inclusive of administrative labor hours which should be presented separately in Schedule 2.11(b-1).

5. **A staffing plan** identifying management and technical staff and their responsibilities (submit resumes only for unapproved employees).

6. **A final M/WBE Utilization Plan** identifying subcontracts most likely to result in M/WBE utilization to be submitted to this office within two weeks.

If you have any questions concerning contractual procedures, please contact Mr. Ralph Burger, Contract Manager, at reburger@gw.dec.state.ny.us. If you have any questions concerning WA related technical issues, please contact the New York State Department of Environmental Conservation project manager identified in this letter. Please submit five (5) double-sided copies of the Work Plan and all responses on this WA to me.

Sincerely,

Swapan Gupta
Acting Chief
Contracts and Payments Section
Bureau of Program Management

Enclosures

Date Received and Accepted: 8/21/06

Signature of Consultant: FOR MIKE THOMASSON

w/enclosure

ec: D. Weigel
C. Vasudevan
B. Moulhem
S. Gupta
G. Bobersky
J. Jones, PM
R. Burger, CM
T.Wolosen

From: Patricia Kappeller
To: Ralph Burger
Date: 11/30/2006 3:08:48 PM
Subject: Fwd: Photocircuits - short term fiscal issues

Ralph,

I just met with Joe Jones. I am forwarding and email from EarthTech to you regarding the over budgeting of work plan development costs.

Joe requested that I forward all notes regarding the cost figures to him, he will combine them with the technical notes and send them to EarthTech. Is this ok to do?

Thanks,

Patty

From: Joseph Jones
To: Kappeller, Patricia
Date: 11/30/2006 3:03:09 PM
Subject: Fwd: Photocircuits - short term fiscal issues

>>> "Burton, Allen" <Allen.Burton@earthtech.com> 11/29/06 4:16 PM >>>
Joe -

Since we haven't had much luck being by the phone at the same time, I thought I would try to put in writing the two short-term issues I wanted to discuss.

1 - Aerial photography. We are in the best time of year for doing the overflight (leaves are gone and snow hasn't come). We realize that the work plans we submitted and the associated budget will take some time for NYSDEC to review and for us to come to a final "meeting of the minds" on both the technical scope and a final budget. By that time, we could have three feet of snow, rendering the interpretation of the photography difficult or impossible. Therefore, we would ask that NYSDEC review the mapping requirements, concur that an overflight is necessary, and authorize (but not obligate) us to spend the $3700 to perform the subcontracted overflight (this would be by a subcontractor to our subcontractor, YEC). We would acknowledge that we wouldn't be able to invoice NYSDEC for this work until after the final budget is approved; but just that this item will find its way into that budget.

2 - Work Plan preparation budget. As you by now have no doubt noticed, our budget for the work plans is higher (quite a bit higher) than the original $15,000 authorized in the August 15 letter; the amount shown for that Task 1A (draft plans) represents the actual amount we've spent through November 17. Earth Tech policy is that we're not supposed to work without a budget (i.e., when we reached $15,000 I was supposed to have gotten some sort of authorization to proceed). While in my previous experience (back when we were TAMS Consultants), it was accepted (though discouraged) that NSYDEC was a reasonable client and would usually ultimately authorize reasonable expenditures incurred, even if prior authorization had not been obtained. However, Earth Tech, as part of a publicly-traded company, has more stringent rules and the bottom line is that I shouldn't have gone over the budget without approval; and now my management is concerned that I have expended close to $25,000 over budget (and counting; I'm still committed to getting the plans done [at least as long as I still have a job], including the HASP and also including tracking down some of the loose ends in terms of the background and logistics information we'll need) and that we won't get it back. So what my management is looking for is some sort of acknowledgement that the money we've spent so far will ultimately be reimbursed, although we are obviously aware that project managers (on your end and mine) do not have the authority to authorize money. If it

would help our cause, I can prepare a memo explaining why the complexity of this project warrants more time and money than the 'standard' RI work plan budget.

Oh, and by the way my boss's boss is looking for this by December 1.

Obviously we'll still need to talk but I though I'd use this opportunity to explain in greater detail than a voice-mail message what the short-term issues are.

Thanks for any help you can provide on either of these items,

Allen

need to issue
8/11/06

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12110

P 518.951.2200
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www.earthtech.com

August 11, 2006

Mr. Ralph Burger, Contracts Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Contracts Section, Room 1224
625 Broadway, 12th Floor
Albany, New York 12233-7012

Subject: **Conflict of Interest Check**
Photociruits Corporation (1-30-006) and Pall Corporation (1-30-053)

Dear Mr. Burger:

Per your request, we have reviewed our firm's contractual status with the potentially responsible parties (PRPs) that the Department has indicated are associated with the referenced sites and find no conflict of interest. We have attached the completed conflict of interest certification with this correspondence.

We appreciate your consideration of Earth Tech in this matter. Please feel free to contact me at (518) 951-2341 or Mike Thiagaram at (973) 338-6680 if you have any questions.

Sincerely,

Earth Tech Northeast, Inc.

Helen H. Mongillo
Program Manager, NYSDEC Standby Contract

cc: Mike Thiagaram, PE
Mike Spera, PE

Conflict of Interest Certification

The undersigned, representing **Earth Tech Northeast Inc.**, hereby certifies for the **Photocircuits Corporation and Pall Corporation:**

1) That I have been informed by the New York State Department of Environmental Conservation who the known potentially responsible parties are for the subject sites, and

2) That to the best of my knowledge, **Earth Tech Northeast Inc.**. and the employees of the firm to be assigned to this project have no conflict of interest with the work proposed at these sites, and

3) That **Earth Tech Northeast Inc.** presently has no contracts with, nor imminent prospects of contracts with, potentially responsible parties associated with the above-named sites, and

4) That **Earth Tech Northeast Inc.** has no responsibilities to potentially responsible parties associated with the above-named sites.

Earth Tech Northeast Inc. also agrees to be bound by provisions of Appendix B, Section II of the Standby Contract between the Department and **Earth Tech Northeast Inc. (Contract #D004436).**

Certified By:

Helen Mongillo Helen Mongillo, P.G.

Signature of Consultant

Earth Tech Northeast, Inc.

Consulting Firm

8/11/06

Date

From: "Mongillo, Helen" <Helen.Mongillo@earthtech.com>
To: Ralph Burger <reburger@gw.dec.state.ny.us>
Date: 8/11/2006 12:54:40 PM
Subject: COI Photocircuits and Pall Corporation

Ralph,

Attached are the results of our COI check for the subject sites. We see no conflicts.

Thank you for considering Earth Tech.

Helen

Helen Mongillo, P.G.

Environmental Engineer/Hydrogeologist

Geosciences Department Manager

40 British American Boulevard

Latham, New York 12110

phone: 518.951.2341

cell: 518.275.1001

fax: 518.951-2200

email: helen.mongillo@earthtech.com

e

CC: "Thiagaram, Mike" <Mike.Thiagaram@earthtech.com>, "Spera, Michael" <Michael.Spera@earthtech.com>

Photocircuits /

Pall Corp.

4436-4

8/16/06

From: Ralph Burger
To: mike.thiagaram@earthtech.com
Subject: Issuance of Photocircuits/Pall Corps., OU2 Work Assignment #4436-4

Attached is a new work assignment. Please sign and return. Hard copy to follow.

CC: Bobersky, Guy; Burger, Ralph; Gupta, Swapan; Jones, Joseph; Moulhem, Brenda; Vasudevan, Chittibabu; Weigel, Donna; Wolosen, Tim

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Room 1224
625 Broadway, Albany, New York 12233-7012
Phone: (518) 402-9764 • **FAX:** (518) 402-9722
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

Mr. Mike Thiagaram, PE
EarthTech Northeast, Inc.
300 Broadacres Drive
Bloomfield, N.J. 07003

August 15, 2006

RE: Investigation/Design Standby Contract
Work Assignment # D004436-4
Photocircuits Corp, OU2, Site #130009
Pall Corp., OU2, Site #130053B

Dear Mr. Thiagaram:

Enclosed is a copy of a Work Assignment (WA) for the above referenced project. Please acknowledge receipt by returning a signed copy of this letter to me within one week.

This WA has been identified by an alpha-numeric designation denoting EarthTech Northeast contract number and sequential number of this WA. Although this letter authorizes the expenditure of Work Plan Development Cost funds, these funds will not be available for payment until the Office of the State Comptroller (OSC) encumbers monies for this WA (generally this takes four weeks).

Project Name:	Photocircuits/Pall Corps., OU2
W.A. Number:	D004436-4
Site Number:	130009 and 130053B
Program Element:	Remedial Investigation/Feasibility Study
NYSDEC Project Manager:	Joseph Jones
Phone Number:	(518) 402-9613

Work Plan Development Cost Authorization (Task 1):	$ 15,000
Estimated Work Assignment Budget (Tasks2 -4):	$ 505,000
Total Estimated Work Assignment Budget (All Tasks):	$ 520,000

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Sincerely,

Swapan Gupta
Acting Chief
Contracts and Payments Section
Bureau of Program Management

Enclosures

Date Received and Accepted:_____

Signature of Consultant:_____

w/enclosure

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If you have any questions concerning contractual procedures, please contact Mr. Ralph Burger, Contract Manager, at reburger@gw.dec.state.ny.us. If you have any questions concerning WA related technical issues, please contact the New York State Department of Environmental Conservation project manager identified in this letter. Please submit five (5) double-sided copies of the Work Plan and all responses on this WA to me.

Sincerely,

Swapan Gupta
Acting Chief
Contracts and Payments Section
Bureau of Program Management

Enclosures

Date Received and Accepted:_____

Signature of Consultant:_____

w/enclosure

ec: D. Weigel
C. Vasudevan
B. Moulhem
S. Gupta
G. Bobersky
J. Jones, PM
R. Burger, CM
T.Wolosen

New York State Department of Health
Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

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STATE SUPERFUND STANDBY CONTRACT WORK ASSIGNMENT
REMEDIAL INVESTIGATION /FEASIBILITY STUDY
Photocircuits Corporation, Site No. 130009, Operable Unit 02
Pall Corporation, Site No. 130053B, Operable Unit 02
(Deep Groundwater)
Nassau County, New York
NYSDEC Project Manager: Joseph Jones

I Work Assignment Objectives

The purpose of this Engineering Standby Contract Work Assignment is to conduct a remedial investigation/feasibility study (RI/FS) for deep groundwater (60 ft bgs or deeper) at the Photocircuits Corporation and Pall Corporation sites in Nassau County.

II Site History and Background

The Photocircuits site is located in northern Nassau County. The site is located in a small industrial park in Glen Cove, Nassau County, and covers approximately 10.8 acres. Two sides of the property are bordered by roadways: on the north by Sea Cliff Avenue, and on the east by State Route 107. The Pass and Seymour site (No. 1-30-053A) occupies the property immediately west of the site, with Glen Cove Creek running between the two properties, and the Glen Head Country Club is located to the south. The Photocircuits site is an active facility that produces printed circuit boards. The facility has a number of on-site buildings, providing approximately 158,000 square feet of office and manufacturing space. The site has been in operation since 1956. Groundwater at the site is contaminated with solvents, including tetrachloroethylene and trichloroethylene. The site is a Class 2 site on the Registry. Interim Remedial Measures including AS/SVE, bioremediation and a hydraulic barrier have been undertaken at the site.

The Pall site is located at 30-36 Sea Cliff Avenue, directly north of the Photocircuits site. The site is situated on the north side of Sea Cliff Avenue and is approximately 4.6 acres in size. Glen Cove Creek forms the western property border. The Pall site contains two industrial buildings. The 30 Sea Cliff Avenue building is currently unoccupied. August Thomsen, a pastry bag manufacturer, currently occupies the building at 36 Sea Cliff Avenue. The rest of the site is almost entirely paved with asphalt. A day care center borders the Pall site on the north. Adjacent to the day care center is the inactive Carney Street public water supply well field. One well at the well field is still viable for potable use and is 168 feet deep. This well has been out of service since 1978. The Pass and Seymour site (No. 1-30-053A) is located southwest of the Pall site. The site is a Class 2 site on the Registry. A March 2004 ROD for the site selected In-Situ chemical oxidation as the remedy for shallow groundwater and soil (Operable Unit 01) contamination at the site. A pilot study for this remedy is ongoing.

III Geology and Hydrology

The site is underlain by the following sequences, in descending order: the Upper Glacial Aquifer, the Port Washington confining unit, the Port Washington aquifer, the Lloyd Aquifer and bedrock. Depth to groundwater varies between 4 and 10 ft bgs at the site. Hydraulic conductivity generally varies between 10 and 300 ft/day. Measurements from deep wells indicate that groundwater flow is to the northwest. Shallow groundwater also flows predominantly toward the northwest. As the groundwater flow direction in the area is north-northwest, the Photocircuits site is hydraulically upgradient of the Pall site. Groundwater at the site is contaminated with solvents, including tetrachloroethylene and trichloroethylene.

IV Scope of Work

Task 1: Work Plan Development

Task 1A The Engineer will develop and submit a Draft Work Plan within 3 weeks of work assignment acceptance. The Draft Work Plan will include the following:

- Summary of the site reconnaissance and records searched described below:
  - Review of available background information starting with documents from the NYSDEC Central and Regional Office, Nassau County Department of Health
  - Regulatory-Database Review, including review of the Remedial Investigation, Interim Remedial Measure(s) and groundwater monitoring reports for the Photocircuits, Pass and Seymour and Pall sites (sites 1-30-009, 1-30-053A and 1-30-053B), and the Site Characterization report for the Sea Cliff Avenue Industrial Area.
  - Interviews with knowledgeable individuals
  - Historical-Land-Title-Records Review (Property tax files, recorded land titles, building department records, zoning/land use records, libraries, and historical societies, etc.)
  - Historical-Aerial-Photograph Review
  - Review of Regional and Local Geology
  - Regulatory information to be collected related to permits, prosecutions/control orders/work orders/complaints or any violations

- Property use records such as fire insurance maps, city directory searches and contaminated site and property-use registries where available
- Company records search for useful documents such as building plans, environmental monitoring data, waste management records
- Geological and Geotechnical reports on the environmental condition of subject property
- Site Reconnaissance visit with the NYSDEC Project Manager scheduled by the NYSDEC within two weeks of the Engineer's acceptance of the Work Assignment

- A general scope of work for the Remedial Investigation
- Identification of the preliminary field activities and primary areas of concern
- A detailed level of effort for work plan development
- Preliminary level of effort and budget for Remedial Investigation
- Preliminary schedule of milestones and deliverables
- List of key staff, their titles and responsibilities
- Preliminary subcontracting list including a Minority/Women-owned Business Enterprise (M/WBE) Utilization Plan

Task 1B The Final work plan will be delivered to the NYSDEC by the Engineer within one week after the NYSDEC's acceptance of the Draft Work Plan. Development of a Final Work Plan will include, if necessary, a meeting between the engineer's representatives and appropriate NYSDEC staff in Albany to review comments and details of the Draft Work Plan. The NYSDEC will allow reasonable time for revision and submission of the Final Work Plan. The Final Work Plan will include the following:

- Detailed level of effort and budget for all work, including subcontracting.
- All pertinent information to conduct field activities including sampling locations, analytical methods, and a detailed schedule of progress with milestones and deliverables. Any decisions to be made in the field will be clearly stated.
- Summary of the site reconnaissance and records searched described above.

- Staffing Plan that identifies and states the responsibilities of the primary staff who are to manage and oversee these characterizations.

- The identity of the subcontractors and the M/WBE commitment

- Site specific Health and Safety Plan, Quality Assurance Project Plan, and a Citizen Participation Plan as follows:

    - Health and Safety Plan

        - This plan will be developed based on the most recent Federal State and Local statues and regulations. The plan will include a section on Community Health and Safety as well as Community Air Monitoring as set forth in the attached Community Air Monitoring Plan.

    - Quality Assurance Project Plan

        - A plan must be generated by the Engineer that identifies the steps taken to protect sample quality throughout the Work Assignment. Samples that are to be analyzed at a lab must be analyzed by a NYSDOH ELAP certified Lab that has ELAP certification for the methods selected. This plan must comply with all elements in Schedule 1, Work Element V of the standby contract. A third party that is independent of the laboratory that analyzed the samples and independent of the consulting firm must validate all samples collected. A Data Usability Report must be generated by the Engineer's QA officer and delivered to the NYSDEC with the report.

    - Citizen Participation Plan

        - The Engineer will be called upon to develop a Citizen Participation Plan which will identify groups, individuals, and officials that may be interested in any remedial activities that take place at these sites. This plan will involve determining the addresses of adjacent property owners and local officials, advocacy groups. The Engineer may be called upon to provide information and help plan a pre-characterization public meeting or generate a fact sheet to be distributed to the addresses complied.

When the Work Plan is approved by the NYSDEC, a notice to proceed will be sent from the NYSDEC to the Engineer. Work Plan development will be scheduled so a Notice to Proceed can be issued within 90 days of Work Assignment acceptance. No work beyond Task 1 will begin until a Notice to Proceed is issued by the NYSDEC.

Task 2: Remedial Investigation

A field investigation will be conducted to determine the sources of contamination within the site and its threat to human health or the environment. The engineer must complete the following specific work:

- Base Map Development
    - Prior to sampling, an initial map of the site will be produced by a land surveyor licensed by the State of New York. The basis of bearings and elevations of the survey will be in accordance with the New York State Plane Coordinate System (North American Datum [NAD] 1983) and North American Vertical Datum (NAVD) of 1988. The map will be at the scale of 1" = 40'. The mapping will include, at a minimum, existing site features, structures, aboveground utilities, horizontal limits of Glen Cove Creek, limits of vegetation, ditches, sidewalks, curbs, catch basins, trials, streets, fences, gates, and other significant physical and environmental sensitive features. The map will include all existing and new monitoring wells.
- Survey
    - During the field work, the location (within 0.1 feet) of each sample point will be determined and presented on the revised base map with a scale of one inch to forty feet.
- Groundwater Investigation
    - Two sampling events per well will be done for VOC analysis and groundwater elevation with an approximately 3 month interval between sampling events. The one exception will a third round of samples in conjunction with the Carney Street Well Field work as described below.
    - All groundwater samples will be analyzed for Target Compound List (TCL) VOCs.
        - Prior to sampling, the depth to water in each well will be measured to calculate the volume of standing water in the well. Water level measurements will be collected using an electronic water level indicator. The pump will be lowered slowly into the screen zone of the well and positioned at least 2 feet from the bottom of the well. The pump will be operated at a flow rate of between 200 to 500 milliliters per minute (ml/min), ideally to stabilize the water level within the well with a

maximum draw-down of 0.3 foot. Care will be taken to maintain pump suction.

- During purging, pH, specific conductance, temperature, turbidity, dissolved oxygen and redox potential (Eh) will be monitored at approximate 5-minute intervals. The wells will be considered stabilized and ready for sample collection when indicator parameters have stabilized for three consecutive readings ±0.1 for pH, ±3% for specific conductance, ±10 millivolts for redox potential, and ±10% of DO and turbidity. A maximum of one casing volume will be removed from a well. All purge water will be discharged to the City of Glen Cove sewer system.

- Groundwater samples will be collected using the lowest sustainable flow rate into the laboratory supplied 40 ml vials. All samples will be stored in an iced cooler and will be shipped under chain of custody procedures to the laboratory within 48 hours after collection.

- Appropriate QA/QC procedures will be followed and samples will include matrix spike samples, matrix spike duplicate samples and trip blanks. Decontamination of the submersible pump used for purging will be performed in accordance with procedures described in the QA/QC Plan.

o Water level measurements will be collected from all of the wells of the monitoring network identified to be useful and viable during the well inspection survey and all newly installed wells. The water levels will be collected prior to scheduled sampling of the wells and all measurements will be collected within 1 day. An electronic water level indicator will be used to collect the measurements to a precision of 0.01 foot.

o Existing Monitoring Well Groundwater Sampling

- Because several existing monitoring wells have not been sampled in several years, this well inspection task will be conducted to determine the accessibility and integrity of wells identified for potential sampling. The well survey will investigate the following:

  - Security of well cover
  - Condition of surface seal
  - Existence of ponded water or fluids
  - Diameter of well
  - Depth of well
  - Water level
  - Other pertinent factors

- The existing monitoring wells identified to be useful and viable during the well inspection survey will be purged and sampled.

- The wells to be sampled include:

GC-1D, GC-2S, GC-2D, GC-3S, GC-3M, GC-3D, GC-4S, GC-4D, GC-5S, GC-5D, GC-10S, GC-11S, GC-11-D, MW-1P, MW-1PI, MW-1PD, MW-1GS, MW-1GI, MW-1GD, MW-2A, MW-2AI, MW-2AD, MW-3, MW-4P, MW-4PI, MW-4PD, MW-5PS, MW-5PI, MW-5PD, MW-6P, MW-6PD, MW-7, MW-8, MW-9, MW-10, MW-10PS, MW-10PI, MW-10PD, MW-11, MW-11PS, MW-11PI, MW-11PD, MW-12, MW-12PS, MW-12PI, MW-12PD, MW-13PS, MW-13PI, MW-13PD, MW-14PCD, MW-15PCD, MW-16PCI, MW-16PCD

- These groundwater monitoring wells and others on and in the vicinity of the site are identified in the following table. The table also provides the date of installation, screen zone and diameter of the wells.

Existing Monitoring Well Construction Details				
Site	**Well Designation**	**Date Installed**	**Screen Zone (feet below grade)**	**Well Diameter (inches)**
Carney Street Well Field	N-3466	NA	148-173	NA
	N-8326 (No. 21)	NA	120-165	NA
	N-8327	NA	115-165	NA
	MW-1GS	NA	TD=23.75	NA
	MW-1GI	NA	TD=113.5	NA
	MW-1GD	NA	TD=205	NA
City of Glen Cove	MW-1GS	1/17/2000	5-15	NA
	MW-1GI	1/18/2000	40-50	NA
	MW-1GD	1/18/2000	85-95	2
	MW-2GS	9/7/1999	5-15	NA
	MW-2GI	9/7/1999	40-50	2
	MW-2GD	9/7/1999	90-100	NA
August Thomsen	MW-1A	NA	1.5-11.5	NA
	MW-2A	NA	3.5-13.5	NA
	MW-2AI	3/23/1999	40-50	2
	MW-2AD	3/22/1999	80-90	2
	MW-12PS	8/23/1999	5-15	2
	MW-12-PI	8/23/1999	40-50	2
	MW-12PD	8/20/1999	85-95	2
Pall Corporation	MW-1P	1/21/1992	5-15	NA
	MW-1PI	3/10/1999	41-51	2
	MW-1PD	3/11/1999	90-100	2
	MW-2P	1/22/1992	4-14	NA
	MW-3P	1/21/1992	3-14	NA
	MW-4P	1/20/1992	13-23	NA
	MW-4PI	3/12/1999	45-55	2
	MW-4PD	3/16/1999	91-101	2
	MW-5P	1/20/1992	3-13	NA
	MW-5PI	3/17/1999	40-50	2
	MW-5PD	3/17/1999	90-100	2
	MW-6P	8/14/1992	50-60	4
	MW-6PD	3/9/1999	90-100	2
	MW-7P	11/18/1996	3-18	4
	MW-8PS	3/25/1999	5-15	2
	MW-8PI	3/25/1999	40-50	2
	MW-10PS	3/19/1999	5-15	2
	MW-10PI	3/19/1999	40-50	2
	MW-10PD	3/22/1999	90-100	2
	MW-11PS	8/17/1999	5-15	2
	MW-11PI	8/17/1999	40-50	2
	MW-11PD	8/16/1999	85-95	2
	MW-13-PS	9/19/1999	5-15	2
	MW-13PI	8/19/1999	40-50	2
	MW-13PD	8/18/1999	85-95	2

Existing Monitoring Well Construction Details				
Site	Well Designation	Date Installed	Screen Zone (feet below grade)	Well Diameter (inches)
Sea Cliff Avenue	MW-14PCD	1/4/2000	85-95	2
	MW-15PCD	2/22/2000	90-100	2
	MW-16PCI	1/6/2000	40-50	2
	MW-16PCD	1/6/2000	85-95	2
MAN Products	MW-1M	NA	19-34	2
Photocircuits	MW-2	NA	10-25*	2
	MW-3	NA	5-20*	2
	MW-4	NA	10-25*	2
	MW-5	NA	85-100*	2
	MW-6	NA	5-15*	2
	MW-7	NA	8-23	4
	MW-8	NA	155-170	2
	MW-9	NA	10-25	2
	MW-10	NA	115-130	2
	MW-11	NA	155-170	2
	MW-12	NA	40-50	2
	MW-13	NA	40-50	4
	MW-14	NA	10-20	4
	NC-WELL	NA	NA	NA
Public Supply Well Field Monitoring Wells	GC-1S	NA	19-39	NA
	GC-1D	NA	175-195	NA
	GC-2S	NA	19-39	NA
	GC-2D	NA	188-208	NA
	GC-3S	NA	4-24	NA
	GC-3M	NA	94-114	NA
	GC-3D	NA	180-200	NA
	GC-4S	NA	34-54	NA
	GC-4D	NA	200-220	NA
	GC-5S	NA	85-105	NA
	GC-5D	NA	234-254	NA
	GC-6S	NA	130-150	NA
	GC-6D	NA	255-275	NA
	GC-7S	NA	80-100	NA
	GC-8S	NA	86-106	NA
	GC-8D	NA	169-189	NA
	GC-9S	NA	40-60	NA
	GC-10S	NA	20-40	NA
	GC-11S	NA	95-115	NA
	GC-11D	NA	210-230	NA
	GC-WP1	NA	5-10	NA
	G-4	NA	125-130	NA
Pass & Seymour (Slater Electric)	MW-1S	1/27/1992	6-21	4
	MW-2S	1/27/1992	6-21	4
	MW-3S	1/27/1992	5-20	4

- New Groundwater Monitoring Well Installation and Sampling

  - Prior to installing the wells, a geophysical survey will be conducted at each locations to investigate the presence of buried utilities.

  - The new monitoring wells will be installed using 4¼-inch ID hollow stem augers. If difficulties with "running sands" are encountered which hinder drilling, potable water or drilling mud may be introduced to maintain a positive hydrostatic head.

  - Split-spoon samples will not be collected during construction of these wells. Soil cuttings generated from the boreholes will be logged and documented by a geologist. Notes will be kept in both bound field books and boring logs. The Unified Soils Classification System will be used to describe the soil. Cuttings will also be screened for VOCs using an organic vapor analyzer equipped with a photoionization detector (PID).

  - The monitoring wells will be constructed of 2-inch Schedule 40, 0.010-inch slot PVC well screen and threaded, flush joint PVC casing. Each well screen will be 10 feet long.

  - The well screen and riser pipe will be inserted into the hollow stem auger and set at the desired depth. A sand filter pack will be placed into the annular space around the screen to at least 2 feet above the top of the screen. A minimum 2-foot thick bentonite seal will then be placed above the filter pack. The remaining borehole will be filled to just below ground surface with a bentonite/cement grout. A flush-mounted well cover will be installed in a cement pad at ground surface.

  - Attempts will be made to install all of the wells using the hollow stem auger drilling method. However, since the screen zone for the deep well in the cluster to be installed at the Carney Street Well Field is 210 to 220 feet below grade, this well may need to be constructed using the mud rotary drilling method, depending on the drilling conditions encountered during construction of the other wells. If the mud rotary method is required, a minimum 6-inch diameter roller bit will be utilized to advance the borehole. This well will be constructed of 2-inch Schedule 40, 0.010-inch slot PVC well screen and threaded, flush joint PVC casing. The filter pack, bentonite seal, grout and well cover for this well will be installed in the same manner as previously described.

  - All drilling equipment will be decontaminated before the first use during this project, between boreholes and prior to demobilization using high-

pressure steam. Decontamination will be conducted at a dedicated decontamination pad constructed for this project on the Pall property. Decontamination fluids will be contained for subsequent discharge to the City of Glen Cove sewer system.

- Soil cuttings from all well borings will be containerized in lined and covered roll-off containers for subsequent off-site disposal. The roll-off containers will be staged at the Pall property.

- To characterize the lithology of the site deposits, including the deep zones of the new wells, gamma logging will be conducted in selected groundwater monitoring wells. The gamma logging will be conducted in the wells after they are installed. If any of the specific wells identified above are unable to be logged should the well not be plumb and the sensor probe unable to fit down the well, a nearby well will be logged with NYSDEC approval. Six wells will be gamma logged to encompass the following areas:

    - Near the Carney Street Well Field at the new deep well cluster.
    - At the northwest corner of the Thomsen August property at well cluster MW-2A.
    - In the center of the Pall property at well cluster MW-4P.
    - Within Sea Cliff at well cluster MW-16.
    - At northern drum storage area on Photocircuits property at well cluster MW-GW4.
    - At the southern property boundary on Photocircuits property at well cluster MW-19.

- All new monitoring wells will be purged and sampled after installation.

o New Well Installation - Photocircuits Property

- One permanent monitoring well quadruplet will be installed near 31-GW-04B and screened at 70, 90, 130 and 160ft bgs. For the deepest well, a complete five-ft interval profile will be obtained by hydropunching ahead of the casing. The 160 ft well will be installed first. Depending on the results of the profiling, the installations of the other wells in the quadruplet may be required to be suitable for treatment wells.

- The workplan will include provision for two additional 150 ft depth hydropunch borings near 31-GW-04B and up to 3 singlet monitoring wells of depths 150 ft or less, to be used if the results of the permanent monitoring well installation and the hydropunch borings warrant.

Groundwater samples will be taken from the hydropunch borings from the watertable to the maximum depth at 20 ft intervals.

- One permanent monitoring well doublet will be installed on the southern boundary of the property and screened at 60 and 100 ft bgs.

- Four permanent monitoring well triplets will be installed along Sea Cliff Avenue, and screened at 80, 100 and 120 ft bgs.

- The work described above will be coordinated with the work carried out on and downgradient of the Pall property to the extent practicable. Precise locations of the wells described above will be determined in consultation with the NYSDEC project manager.

o New Well Installation - Pall Property

- One permanent monitoring well located in the vicinity of MW-4D, screened between 145 and 155 ft bgs.

- One permanent monitoring well located in the vicinity of MW-12PD, screened between 145 and 155 ft bgs.

- One permanent monitoring well located in the vicinity of MW-11PD, screened between 145 and 155 ft bgs.

- One permanent monitoring well located in the vicinity of MW-2AD, screened between 145 and 155 ft bgs.

o New Well Installation - Carney Street Well Field Property

- One permanent monitoring well quadruplet located approximately 75 ft south of the Carney Street well field, screened at approximately 80, 120, 160 and 220 ft bgs. Provision will be made for three sampling events, two of which will be conducted in conjunction with the sampling of the existing wells, and a third to be timed to coincide with a pump test of the Carney Street production well (see below).

o Sampling of the Carney Street Production Well

- A pump test will be conducted on Well No. 21 of the Carney Street Well Field. The objectives of this test are: 1) to determine the capture zone and hydraulic dynamics of Well No. 21, and 2) to determine the groundwater quality of the pumped groundwater. The results of the pump test will be

evaluated to assess the viability of future operation of Well No. 21 for VOC plume capture, treatment and potential usage of the treated water for industrial purposes.

- The pumping of Well No. 21 and associated discharge will be coordinated with the City of Glen Cove. The pump test will be conducted for 24 hours and the well will be pumped at the maximum practical pumping rate at a constant rate. It was reported in historical files that the well had a capacity of 1,400 gallons per minute (gpm). Water level measurements will be collected from the production well and selected nearby monitoring wells. Background measurements will be collected for at least 1 day prior to the pump test. The water levels will be collected manually using an electronic water level indicator and electronically by transducers with data logging capacity. Water levels measurements during the pump test and recovery period will be collected from the selected monitoring wells. The recovery period will be considered when the water level have returned to 90% of pre-test levels.

- The pumped water will be assumed to be discharged to the Glen Cove sewer system as was reportedly done during previous investigations. Permission will be obtained from the City of Glen Cove and the pump test will be coordinated with the City.

- Samples for analysis will be collected of pumped water from Well No. 21 in addition to the new wells of the cluster to be installed 75 feet to the south. The samples will be collected at the beginning, middle and end of the pump test and analyzed for TCL VOCs.

Task 3: Remedial Investigation Report Requirements

Documents will be, in addition to hard copies, provided electronically to the NYSDEC in Adobe Acrobat (.pdf) format. Preliminary reports and supporting documents for the final reports must also be delivered to the NYSDEC. These preliminary and supporting documents must contain a cover page indicating that they are not the finalized documents and state the percent of work this document represents and the amount of work that remains. At the time of Work Assignment completion, the Engineer will submit all final documents and data that were generated during the Work Assignment to the NYSDEC. If requested, the Engineer shall deliver to the NYSDEC a computer readable magnetic media copy in American Standard Code for Information Interchange (ASCII) format of preliminary or final reports, specifications, or data generated under this contract.

At the time of completion of the Work Assignment services, the Engineer shall deliver to the NYSDEC the original copies, two reproducible copies, plus additional copies, of all final

plans, drawings, specifications, computations, designs, construction data, reports, record drawings, and all other documents and data pertaining to the work which is the subject of the Work Assignment to the extent that the information has not already been furnished.

- Throughout the Work Assignment
  - The Engineer will continuously monitor and evaluate budget and project status. A Cost Control Report, Project Report, and Progress Schedule Update will be generated by the Engineer and delivered to the NYSDEC on a monthly basis. A quarterly report indicating M/WBE utilization by amount of work in dollars assigned to and accomplished by M/WBE will also be delivered to the NYSDEC.

- After Field Work is completed
  - The information and sample results obtained during the Remedial Investigation program will be used to characterize the Site, including determination of the nature, extent and sources of contamination, and groundwater flow and quality during pumping of Well No. 21. This information, together with the documentation of all field procedures undertaken, including sampling, testing, and quality assurance/quality control, will be included in the Remedial Investigation Report. Analytical results will be presented in a spreadsheet format and compared to the New York State Class GA groundwater standards and guidance values.

  - The report will present figures and maps illustrating the locations of all sampling points, including monitoring wells, as well as pertinent analytical results. Cross sections will be prepared, if necessary, to depict the geologic and hydrogeologic characteristics of the site, as well as pertinent hydraulic and analytical information. Groundwater contour maps and flow diagrams will be prepared for hydrogeologic units, to depict groundwater flow characteristics with and without Well No. 21 pumping.

  - A draft Remedial Investigation Report will be prepared and submitted to the NYSDEC for review. Comments received on the draft report will be incorporated into the final Remedial Investigation Report. The engineer will plan to attend a public meeting with the NYSDEC to present the findings of the investigation.

  - A feasibility study (FS) will be conducted to identify and evaluate remediation technologies, and recommend remedial action. The FS will be prepared after the Remedial Investigation Report has been finalized. As part of the FS, presumptive remedies will be evaluated including groundwater extraction and treatment, air sparging, no further action and long-term monitoring. If applicable, new emerging technologies not identified in the presumptive remedies for the Site will also be

evaluated as part of the FS. The FS will include development, preliminary screening and detailed evaluation of remediation alternatives.

- A draft Feasibility Study Report will be prepared and submitted to the NYSDEC for review. Comments received on the draft report will be incorporated into the final Feasibility Study Report. The engineer will plan to a public meeting with the NYSDEC to provide support for presentation of the Proposed Remedial Action Plan.

VI Period of Performance

This Work Assignment will be completed within eighteen months of the Notice to Proceed. A tentative schedule follows.

PROJECT SCHEDULE

TASK	TIME TO COMPLETE FROM WA ISSUANCE (WEEKS)
Task 1 - Work Plan Preparation	
Site Visit/Scoping Meeting	3
Draft RI/FS Work Plan	4
Final RI/FS Work Plan	12
Task 2 - Field Investigation	
Well Inspection Survey	16
Hydropunch Sampling	16
Monitoring Well Installation	20
Well Sampling	
• First Round	21
• Second Round	33
Collection of Water Level Measurements	
• First Round	21
• Second Round	33
Well Surveying and Base Map Development	20
Pump Test	20
Laboratory Analysis	
• First Round	25
• Second Round	37
Data Validation	
• First Round	29
• Second Round	41
Task 3 - Remedial Investigation Report	
Draft Remedial Investigation Report	50
Final Remedial Investigation Report	58
Remedial Investigation Report Public Meeting	To be determined
Task 4 - Feasibility Study	
Draft Feasibility Study Report	62
Final Feasibility Study Report	70
Public Meeting (Proposed Remedial Action Plan)	To be determined

VII Work Assignment Cost Authorization

Fifteen thousand dollars is authorized for work plan development. No additional funds will be authorized until the work plan is approved.

VIII Budget

ITEM	BUDGET
Work Plan Development	$15,000
Field Investigation	$395,000
RI Report	$65,000
FS Report	$45,000
Total	$520,000

1/31/2007

Mike,

Please make the following changes and resubmit 2.11 schedules:

1. YEC, Inc -
   a. Labor rate for NSPE Level VIII should be $61.60 as per the approved contract. Total labor dollars should be $308.00 ($61.60 * 5 hours)
   b. Labor rate for NSPE Level II should be $23.30 (transposition occurred) as per the approved contract. Total labor hours should be $2,563.00 ($23.30 * 110 hours)
   c. Total Direct Salary Costs should total $11,797.14
   d. Indirect Costs should total $13,802.65 ($11,797.14 * 117%)
   e. Fixed Fee should be $3,839.97 {($11,797.14 + $13,802.65 + $5699.50) * 15%}

2. Unit Price Subcontracts -
   a. Since unit price subcontracts have not been procured and approved please provide quotes for Mitkem, Hager Richter, Land, Air, Water Environmental Services

Thanks,

Patty

EarthTech
A tyco International Ltd. Company

300 Broadacres Drive
Bloomfield, NJ
07003

P 973.338.6680
F 973.338.1052
www.earthtech.com

November 22, 2006

Mr. Swapan Gupta
Acting Chief, Contracts and Payments Section
New York State Department of Environmental Conservation
Bureau of Program Management
625 Broadway
Albany, New York 12233-7012

Re: Investigation/Design Standby Contract
Work Assignment #D004436-4
Photocircuits Corp., OU2, Site #130009
Pall Corp., OU2, Site #130053B

Dear Mr. Gupta:

Earth Tech Northeast, Inc. (Earth Tech) is pleased to provide five hard copies of the enclosed Work Plan, including Appendix A (Field Activities Plan) and Appendix B (Quality Assurance Project Plan) for the deep groundwater contamination (OU2) at the Pall/Photocircuits site in Glen Cove, NY. The subject submittal has been prepared in accordance with Task 1 of the August 15, 2006 Work Assignment.

Should you have any questions or require additional information, please do not hesitate to contact me at 973-338-6680.

Very truly yours,

Earth Tech Northeast, Inc.

Allen Burton
Project Manager

Enclosures

New York State Department of Environmental Conservation

MEMORANDUM

To: **File**
From: Patricia Kappeller, Contract Manager, CPS, BPM, DER
Subject: Review of Cost Sections for EarthTech Work Assignment **#D004436-04** Final Work Plan for the Photo/Pall Corp OU#2 Site

Date: November 30, 2006

I have reviewed the cost sections for the above referenced WA. The cost sections appear to be reasonable and satisfactorily completed. The following checklist outlines the review process and review comments. Please see me if you have any questions.

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	Are the costs for Task 1 and the total WA within the budget on the Conceptual Approval?	X		
	Is there a complete set of 2.11 Schedules (a) through (h)?	X		
1.	**Schedule 2.11(a)**			
	Do rates for indirect costs and fixed-fee match contract rates? (Are sliding rates applicable?)	X		
	Do numbers add up?	X		
2.	**Schedule 2.11(b) - Direct Labor Hours**			
	Are average reimbursement rates used for each year? (Check rates in contract vs. time period of WA.)	X		
	Are hours segregated by year?	X		
	Is total cost for each NSPE level shown?	X		
	Does total direct labor costs match amount on Schedule 2.11(a)?	X		
	Do total hours match hours on Schedule 2.11(h)?	X		
	Is the Principal's (NSPE level 9) time less than 2% of total time?	X		
3.	**Schedule 2.11(b-1) - Direct Administrative Labor Hours**			
	Is breakdown of Schedule 2.11(b-1) reasonable (i.e. within the acceptable guidelines of 4% administrative hours and 2% for Principal, both out of total project hours)? If not, did Consultant submit acceptable justification?	X		
4.	**Schedules 2.11©) and (d) - Direct Non-Salary**			
	Are rates listed in Schedule 2.11©) consistent with contract?	X		
	Are rates for in-house and/or miscellaneous costs in their contract (Schedule 2.10(b))? If not, are quotes included for any item (<u>including</u> equipment purchases & rentals; <u>excluding</u> air fare) >$1k? (For estimated cost, not unit cost.)	X		
	Are there any unallowable costs? (e.g. Telephone and shipping cannot be reimbursed as a direct cost if included in ICR; if an item is not in ICR, it should be on 2.10(b) or 2.10©).)		X	
	Are appropriate lodging/per diem rates used?	X		
	Are rates approved for consultant-owned equipment (Schedule 2.10©))?			N/A
	Does total direct non-salary costs match amount on Schedule 2.11(a)?	X		

	GENERAL COST REVIEW CHECKLIST	Yes	No	Comments
	Are other direct costs (# of travel days, lodging, and field equipment usage) reasonable based on field work schedule or supporting documentation from consultant? (Ask PM)	X		
5.	**Schedule 2.11(e) - Cost-plus-fixed-fee subcontracts** (typically don't need quotes)			
	Is proposed subconsultant on standby? If not, does proposed subconsultant have DEC approved rates with another standby consultant?	X		
	Is subconsultant contract active and do rates (direct salary costs, indirect costs, direct non-salary costs, and fixed-fee) match?	X		
	Is there a breakdown of direct non-salary costs (i.e. are additional Sch. 2.11's needed)?	X		
	Does total subcontract amount match Schedule 2.11(a)?	X		
	Has subcontractor justified/obtained adequate quotes for any further subcontracted work?	X		
6.	**Schedule 2.11(f) - Unit Price Subcontracts** (aka per diem, lump sum)			
	Are proposed subcontractors on standby? If not, are there quotes for subcontracts >$1k? Bids should be comparable (quantities and items) and provide unit costs plus job total.	X		
	Standby Drillers (Two-step process) - Are costs from at least 3 standbys compared? If not, an additional quote from a non-standby driller may be needed. Are proper unit costs and mob/demob costs used?	X		
	Standby Lab and Data Validators (Used on a rotational basis) - Do unit cost per sample match unit cost in standby contract?	X		
	Other - Standard solicitation rules (quotes) apply for services >$1k.	X		
	M/WBE - Are sole-source M/WBE contracts <$5k and cost-reasonableness documented?	X		
	Is management fee calculated only on non-professional unit priced subs >$10k? Appropriate rate? (Fee cannot be calculated on professional engineers, architects, or surveyors.)	X		
7.	**Schedule 2.11(g) - Cost Control Report**			
	Do individual 2.11(g)s equal the summary 2.11(g) and do those costs match 2.11(a)?	X		
8.	**Supplemental 2.11(g) - Cost Control Report (subs)**			
	Do schedules include all applicable subcontracts and management fee? (Unit price only.)	X		
9.	**Schedule 2.11(h) - Summary of Labor Hours**			
	Do hours on 2.11(h) match those on 2.11(b)?	X		
10	**Supplemental Supporting Cost Information**			
	Has additional cost info. been supplied which has not been incorporated into WA budget documentation? List: **** Subcontractor Quotes: Need 3 quotes from standby subcontractors. Need 5 quotes, if subcontractors are not standby.** ****For amendments to work assignments, please refer to requirements of Article 5(b) when changing the Fixed Fee. Additionally, the Fixed Fee should not be changed for any rebudget (only for amendments where the percent change of (add specific percentage) is triggered)**			

New York State
Department of Environmental Conservation
Division of Environmental Remediation
Subcontract Certification

On behalf of the Contractor named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract includes all appropriate language and all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following, with exceptions or clarifications (if any) noted on the attached sheet:

1. The Contractor has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It does include a statement of compliance with all licenses, certifications and permits, if applicable. (Note: For laboratories, this can be determined at: http://www.wadsworth.org/labservices.htm).

2. The Contractor has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Contractor performed a Conflict of Interest (COI) check, if applicable, and documented it in writing. (Refer to Appendix B, clause III (e) for applicability. (Note that for standby subcontractors, the COI certification must be submitted to the project manager upon activation.)

4. For subcontracts in excess (or anticipated to be) of $10,000 the subcontractor submitted an acceptable New York State Uniform Contracting Questionnaire. For subconsultants in excess (or anticipated to be) of $10,000 the subconsultant submitted an acceptable New York State Vendor Responsibility Questionnaire. (Information related to vendor responsibility can be found at http://www.osc.state.ny.us/agencies/gbull/g221.htm.)

5. The subcontract includes pass down requirements from Appendix B of the prime contract related to Minority and Women Business Enterprises/WBE and Conflict of Interest (COI).

6. The Subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. Insurance carriers associated with the subcontract are licensed to do business in New York State. The State of New York and the Department of Environmental Conservation are named as additional insurers on the policies. Insurance limits meet prime contract requirements. (Note that licensed insurance can be determined at: http://www.ins.state.ny.us and Best's Rating can be determined at http://www.ambest.com). Pollution liability insurance (for example, drilling subcontractors) and professional liability insurance (for example, subcontracts for professional services and laboratories) is included as appropriate.

9. Documentation supporting this certification is maintained and will be provided within 10 days of any request.

10. See attached page for process used to verify the items listed above.

Allen Burton PROJ MGR — 5/18/07

Signature of Contractor's Authorized Representative — Date

Earth Tech Northeast Inc.	Photocircuits/Pall Corp	D004436-04
Contractor Name	Site / Project Name	Contract No. WA No.

Delta Well and Pump Company Inc., Ronkonkoma, NY
Subcontractor Name

Subcontract certification items were addressed as follows:

1 – Qualifications: Delta Well and Pump (Delta) has previously worked for Earth Tech's Latham office under previous and current standby subcontracts. Delta also has completed the Earth Tech-required Subcontractor Safety Questionnaire.

2 – Cost Reasonableness: Competitively bid; drilling solicitation was split into three parts to maximize responsive bids and to maximize MBE/WBE participation opportunities. Seven firms were solicited; three responsive bids were received for this part of the work. Delta was low bidder for the rotary drilling/deep well installation part of the assignment.

3 – Conflict of Interest. Not required for drillers.

4 – VRQ and UCQ. The VRQ has been received and is on file at Earth Tech. Delta sent the full UCQ to NYSDEC Division of Minority and Budget Services, Minority and Women's Business Program Unit (Attn: Ken Wilson) on April 25, 2007; a highly abridged version was also received by Earth Tech (without financial information).

5 – Standard Clause passdown. Appendix B from prime contract was attached to the Earth Tech – Delta subcontract.

6 – Termination clause. Article 15 from prime contract attached to Earth Tech – Delta subcontract.

7 – Earth Tech subcontract form does not contain the referenced language.

8 – Insurance certificates received from Delta, and NY State and NYSDEC (along with Earth Tech and Earth Tech Northeast) are named as additional insureds. Coverage meets limits specified in prime contract. Automobile and worker's compensation is in force for Delta. Delta also maintains $5,000,000 pollution liability insurance.

9 – Backup documents are in project file in Earth Tech, Bloomfield NJ office.