

Work Authorization No. 008

The attached ARCADIS U.S., Inc. (ARCADIS), Proposal for Project Related Activities, dated June 5, 2008, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 008. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 005 – Revision 2 – Clearing/Grounds Maintenance

- Conduct four grounds maintenance events, one every month beginning in June 2008 and continuing through September 2008. Grounds maintenance will be conducted with a combination of grass cutting and herbicide application.

Task 013 – Revision 1 – Groundwater Sampling

- Collect groundwater samples from 27 existing monitor wells. Twenty-one of these samples will be analyzed for Appendix IX volatile organic compounds, acetophenone, atrazine, bis(2-ethylhexyl)phthalate, cyanazine, 4-nitrophenol, pentachlorophenol, toxaphene, dinoseb, and arsenic. Six of these samples will be analyzed for arsenic by U.S. Environmental Protection Agency (USEPA) Method 6020;
- Collect appropriate Quality Assurance/Quality Control samples; and
- Include the results of data generated during the completion of this task in the Site Characterization Report.

Task 018 – Revision 1 – Corrective Action Plan

- Develop a Corrective Action Plan document to detail the remedial actions to be taken at the site. This document will be based on the remedial option approved by the Mississippi Department of Environmental Quality (MDEQ).

Task 019 – Revision 4 – Site Preparation and Miscellaneous

- Remove concrete to 1 foot above the surrounding grade or less. Removed concrete will be placed in the South Plant west of the railroad tracks in a manner that is conducive to later filling;
- Fill up to 100 cubic yards of sumps located in the South Plant with flowable fill material;

- Conduct a topographic survey for portions of the South Plant and North Plant as defined on Figure 1. The survey will be conducted under the supervision of a professional land surveyor certified to conduct work in the state of Mississippi ;
- Conduct a smoke test on the buried pipe extending from the site to the City of Vicksburg Publicly Owned Treatment Works plant located across Stouts Bayou; and
- Convert approximately 8 linear feet of paper files to electronic format. This task assumes that MDEQ will provide a work space consisting of a 6- to 8-foot-long table and electrical power.

Schedule

- Conduct the grounds maintenance events in Task 005 – Revision 2 for a period of 4 months (June 2008 to September 2008);
- Groundwater sampling in Task 13 – Revision 1 was conducted in March 2008; and
- Develop the corrective action plan in Task 18 – Revision 1 contained within this work authorization within 30 days of the execution of this work authorization.
- Conduct the site preparation and miscellaneous tasks in Task 19 – Revision 4 contained within this work authorization within 60 days of the execution of this work authorization.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. Subcontracts – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work

performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.

- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/ non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/ non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$314,088** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

ARCADIS

TABLE 1A

Former Vicksburg Chemical Company
Vicksburg, Mississippi

	Task	Manhours	Cost	ARCADIS Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS	005-Revision 2	240	\$24,960	\$7,900	\$0	\$0	\$48,400	\$81,260
	013-Revision 1	196	\$19,478	\$4,966	\$0	\$12,862	\$0	\$37,306
	018-Revision 1	236	\$24,920	\$1,500	\$0	\$0	\$0	\$26,420
	019-Revision 4	506	\$50,976	\$7,191	\$0	\$0	\$110,935	\$169,102
ARCADIS Total		1,178	\$120,334	\$21,557	\$0	\$12,862	\$159,335	\$314,088

ARCADIS

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is \$381,678 and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

Mississippi Bluffs Industrial Park, LLC

By: Randall M. Thompson

Title: Manager

Date: 6-15-08

Mississippi Department of Environmental Quality

By: [Signature]

Title: Director OPC

Date: 7/10/08

ARCADIS U.S., Inc.

By: David R. Escudé

David R. Escudé, P.E.

Title: Project Manager

Date: 11 June 2008

ARCADIS

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. Subcontracts – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.
- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

TABLE 1A

ARCADIS

Former Vicksburg Chemical Company
Corrective Action Cost Estimate
Vicksburg, Mississippi

Task	Description	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerical	Subcontractor Expenses	Expenses	Total	Total	
005-Revision 2 Clearing/Grounds Maintenance														
(Clearing/Grounds Maintenance)														
Project Management		8	8									16	\$2,560	
Field Oversight				224								224	\$22,400	
4 events x five 10-hour days per event 1 vehicle for 5 days/event @ \$160/day														
4 events in Level D @ \$130 per event \$500 - field expenses/per event														
Task 005-Revision 1 Subtotal Manhours		8	8	224	0	0	0	0	0	0	0	240	\$24,960	
Expenses				\$2,180							\$5,720		\$7,900	
Subcontractor - Driller													\$0	
Subcontractor - Lab													\$0	
Subcontractor - Construction/Survey													\$0	
4 events x 6 hours travel per week														
1 employee @ \$109 per diem/day														
B&T: \$44,000 (4 events @ \$11,000 per event, June 2008 through September 2008)														
Task 005-Revision 2 Subtotal		\$1,440	\$1,120	\$24,580	\$0	\$0	\$0	\$0	\$0	\$48,400	\$5,720	\$48,400	\$81,260	
013-Revision 1 Groundwater Sampling														
(Groundwater: 27 Wells)														
Project Management		2										2	\$360	
Groundwater Sampling		3	8	164	7			2	10			194	\$19,118	
Seven 10-hour days 1 vehicle - 7 days @ \$160/day														
2 emp. @ \$109 per diem/day \$1,000 - field expenses														
6 hours travel per week Equipment rental @ \$900/event														
Task 013-Revision 1 Subtotal Manhours		5	8	164	7	0	0	2	10	0	0	196	\$19,478	
Expenses				\$1,744							\$3,222		\$4,966	
Subcontractor - Driller													\$0	
Subcontractor - Lab													\$0	
Subcontractor - Construction/Survey													\$0	
Pace \$11,693 (21 full eods + 6 arsenic only + 2 dup + QA/QC)														
Task 013-Revision 1 Subtotal		\$900	\$1,120	\$18,144	\$560	\$0	\$0	\$118	\$380	\$12,862	\$3,222	\$12,862	\$37,366	
018-Revision 1 Corrective Action Plan														
(Corrective Action Plan)														
Project Management		8		8								16	\$2,240	
Corrective Action Plan		40	60		40				40			220	\$22,680	
Task 005-Revision 1 Subtotal Manhours		48	60	8	40	0	0	40	40	0	0	236	\$24,920	
Expenses											\$1,500		\$1,500	
Subcontractor - Driller													\$0	
Subcontractor - Lab													\$0	
Subcontractor - Construction/Survey													\$0	
Task 018-Revision 2 Subtotal		\$8,640	\$8,400	\$800	\$3,200	\$0	\$0	\$2,360	\$1,520	\$0	\$1,500	\$26,420	\$26,420	
019-Revision 4 Site Preparation														
(Site Prep)														
Project Management		2	4									6	\$920	
Concrete Removal		2	4	112				8	8			134	\$12,896	
Sump Filling		1	1	36								38	\$3,920	
Survey		1	2	306								309	\$31,089	
Smoke Test		1	1	14								16	\$1,720	
Electronic Document Conversion		1	2									3	\$440	
Task 026-Revision 1 Subtotal Manhours		8	14	468	0	0	0	8	8	0	0	506	\$50,976	
Expenses				\$2,071							\$5,120		\$7,191	
Subcontractor - Driller													\$0	
Subcontractor - Lab													\$0	
Subcontractor - Construction													\$0	
B&T: \$60,000 (10 days to remove concrete footing, etc. from South Plant)														
B&T: \$4,350 (3 days to locate and fill South Plant sumps)														
DIMCO: \$35,000 (approx. 305 days to survey S Plant and N Plant remediation areas)														
B&T: \$1,500 (1 day to conduct a smoke test)														
Advanced Imaging Solutions: \$3,000 lump sum to convert docs to pdf (Expenses)														
Task 019-Revision 4 Subtotal		\$1,440	\$1,960	\$48,871	\$0	\$0	\$0	\$472	\$304	\$110,935	\$5,120	\$110,935	\$168,102	
Tasks 005-Revision 2, 013-Revision 1, 018-Revision 1, and 019-Revision 4														
Rates		\$180.00	\$140.00	\$100.00	\$80.00	\$62.00	\$62.00	\$59.00	\$36.00					
Total Cost		\$12,420	\$12,600	\$86,400	\$3,760	\$0	\$0	\$2,950	\$2,204				\$120,334	
Expenses		\$0	\$0	\$5,995	\$0	\$0	\$0	\$0	\$0				\$21,667	
Subcontractor - Driller										\$0			\$0	
Subcontractor - Lab										\$12,862			\$12,862	
Subcontractor - Construction/Survey										\$159,335			\$169,335	
Total Tasks 005-Revision 2, 013-Revision 1, 018-Revision 1, and 019-Revision 4		\$12,420	\$12,600	\$92,395	\$3,760	\$0	\$0	\$2,950	\$2,204	\$172,197	\$0		\$314,088	

Work Authorization No. 007

The attached ARCADIS U.S., Inc., Proposal for Project Related Activities, dated September 12, 2007, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 007. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 005-Revision 1 – Clearing/Grounds Maintenance

- Conduct three grounds maintenance events, one every month and one-half beginning in November 2007 and continuing through February 2008. Grounds maintenance will be conducted with a combination of grass cutting and herbicide application; and
- Conduct a one time clearing event to remove of woody vegetation in the storm water pond area.

Task 010-Revision 2 – Storm Water Pond Discharge

- Conduct six monthly storm water pond discharge events beginning in November 2007 and continuing through April 2008. This task assumes that no storm water treatment is necessary prior to discharge.

Task 011 – Revision 1 – Mobile Facilities Purchase or Rental

- Mobile office trailer purchase or rental for a period of one year;
- Provide electrical service to the mobile office trailer for a period of one year; and
- Portable toilet rental, including service once per week, for a period of one year.

Task 021 – Revision 1 – Disposal of Lab Pack and Electronic Waste

- Transport and dispose of material categorized and containerized during the lab pack activities conducted in June 2007;
- Transport and dispose of material consolidated in the fenced area during debris removal activities conducted in May 2007; and
- Transport and dispose of electronic material consolidated in the fenced area during plant debris removal activities.

Task 026 – Revision 1 – Dinitrogen Tetroxide (N₂O₄) Tank Cleaning Work Plan

- Identify safe working procedures for the treatment of the remaining N₂O₄ product located in aboveground storage tanks in the North Plant;
- Develop a work plan for the treatment of the remaining N₂O₄ product and/or its chemical reaction products that incorporates protection of human health and the environment; and
- Develop tank cleaning procedures for the N₂O₄ tanks; and
- Develop a cost estimate for the implementation of the tank cleaning work plan.

Task 027 – Groundwater Modeling

- Perform groundwater modeling in accordance with the Scope of Work contained in Attachment A.

Schedule

- Conduct the grounds maintenance events in Task 005 – Revision 1 for a period of 6 months (November 2007 to April 2008);
- Conduct the storm water discharge events in Task 007 – Revision 2 for a period of 4 months (November 2007 to February 2008);
- Rent mobile facilities as outlined in Task 011 – Revision 1 for a period of 1 year (November 2007 to October 2008);
- Conduct lab pack disposal in Task 21 – Revision 1 and N₂O₄ Tank Cleaning Work Plan development in Task 26 – Revision 1 contained within this work authorization within 60 days of the execution of this work authorization; and
- Conduct groundwater modeling in Task 27 within 120 days of the execution of this work authorization.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. Subcontracts – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure

that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.

- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by Mississippi Department of Environmental Quality (MDEQ).
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/ non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/ non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$235,684** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

Mississippi Bluffs Industrial Park, LLC

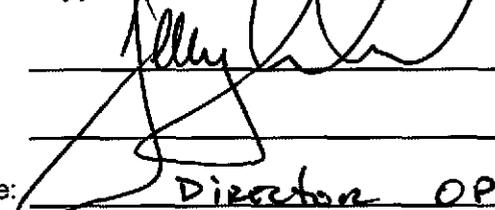
By: 

PAUL S. BUNGE

Title: MANAGING MEMBER

Date: 9/12/07

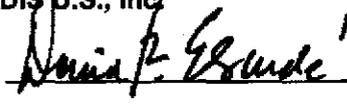
Mississippi Department of Environmental Quality

By: 

Title: DIRECTOR OPC

Date: 9/24/07

ARCADIS U.S., Inc.

By: 

David R. Escudé, P.E.

Title: Project Manager

Date: 12 September 2007

ARCADIS

TABLE 1A

Former Vicksburg Chemical Company
Vicksburg, Mississippi

	Task	Manhours	Cost	ARCADIS Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS	005-Revision 1	238	\$24,120	\$6,520	\$0	\$0	\$43,230	\$73,870
	007-Revision 2	12	\$1,520	\$0	\$0	\$0	\$5,940	\$7,460
	011-Revision 1	8	\$1,120	\$0	\$0	\$0	\$5,610	\$6,730
	021-Revision 1	24	\$2,640	\$733	\$0	\$0	\$30,620	\$33,992
	026-Revision 1	104	\$12,216	\$0	\$0	\$0	\$0	\$12,216
	027	824	\$101,416	\$0	\$0	\$0	\$0	\$101,416
ARCADIS Total		1,210	\$143,032	\$7,253	\$0	\$0	\$85,400	\$235,684

TABLE 1A

ARCADIS

Former Vicksburg Chemical Company
Corrective Action Cost Estimate
Vicksburg, Mississippi

Task	Description	Category Personnel:									Subcontractor Expenses	Expenses	Total	Total	
		Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerical						
005-Revision 1 Clearing/Grounds Maintenance (Clearing/Grounds Maintenance)															
Project Management		2	4	8									14	\$1,720	4 events x 5-10 hour days per event
Field Oversight				224									224	\$22,400	4 events in Level D @ \$130 per event
Task 005-Revision 1 Subtotal Manhours		2	4	232	0	0	0	0	0	0	0	0	238	\$24,120	1 employee @ \$100 per diem/day
Expenses				\$2,000								\$4,520		\$6,520	4 events x 6 hrs travel per week
Subcontractor - Driller														\$0	\$0 Subcontractor Expenses
Subcontractor - Lab														\$43,230	\$0 B&T: \$33,000 (3 events @ \$11,000 per event, Nov. 2007 through Feb. 2008)
Subcontractor - Construction/Survey														\$43,230	(One event every 1.5 months. First event in mid-November.)
Task 005-Revision 1 Subtotal		\$360	\$560	\$25,200	\$0	\$0	\$0	\$0	\$0	\$0	\$43,230	\$4,520	\$73,870	\$73,870	B&T: \$6,300 (1 event to clear storm water ponds)
010-Revision 2 Storm Water Pond Discharge (Storm Water Pond Discharge)															
Project Management		2	4	6									12	\$1,520	
Task 010-Revision 2 Subtotal Manhours		2	4	6	0	0	0	0	0	0	0	0	12	\$1,520	
Expenses														\$0	
Subcontractor - Driller														\$0	
Subcontractor - Lab														\$5,940	\$0 Subcontractor Expenses
Subcontractor - Construction														\$5,940	Harcros: \$5,400 (6 mo. @ \$900 per mo. (Nov. 2007 through April 2008))
Task 010-Revision 2 Subtotal		\$360	\$560	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$5,940	\$0	\$7,460	\$7,460	
011-Revision 1 Mobile Facilities Purchase or Rental (Mobile Facilities Purchase or Rental)															
Project Management		4		4									8	\$1,120	
Task 011-Revision 1 Subtotal Manhours		4	0	4	0	0	0	0	0	0	0	0	8	\$1,120	
Expenses														\$0	
Subcontractor - Driller														\$0	\$0 Subcontractor Expenses
Subcontractor - Lab														\$0	\$0 Sheffield Rentals: \$4,500 (12 mo. @ \$375 per mo. for office and toilet)
Subcontractor - Construction/Survey														\$5,610	Electrical Service: \$50 per month for 12 months
Task 011-Revision 1 Subtotal		\$720	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$5,610	\$0	\$6,730	\$6,730	
021-Revision 1 Disposal of Lab Pack and Electronic Waste (Disposal of Lab Pack and Electronics Waste)															
Project Management		2	2	4									8	\$1,040	Field Expenses
Field Oversight				16									16	\$1,600	1-10 hour days + 6 hours travel
Task 021-Revision 1 Subtotal Manhours		2	2	20	0	0	0	0	0	0	0	0	24	\$2,640	1 employee @ \$100 per diem/day
Expenses				100								\$633		\$733	1 day in Level D @ \$32.50 per day
Subcontractor - Driller														\$0	\$0 Subcontractor Expenses
Subcontractor - Lab														\$0	\$0 USES: \$25,385: lab pack transportation and disposal
Subcontractor - Construction/Survey														\$30,620	\$30,620 USES: \$2,451: lab pack and electronics
Task 021-Revision 1 Subtotal		\$360	\$280	\$2,100	\$0	\$0	\$0	\$0	\$0	\$0	\$30,620	\$633	\$33,992	\$33,992	
026-Revision 1 Dinitrogen Tetroxide Tank Cleaning Work Plan (Dinitrogen Tetroxide Tank Cleaning Work Plan)															
Project Management		2	2	4									8	\$1,040	
Tank Cleaning Work Plan Development		20	20	40									8	\$11,176	
Task 026-Revision 1 Subtotal Manhours		22	22	44	0	0	0	8	8	0	0	0	104	\$12,216	
Expenses														\$0	
Subcontractor - Driller														\$0	
Subcontractor - Lab														\$0	
Subcontractor - Construction														\$0	
Task 026-Revision 1 Subtotal		\$3,960	\$3,080	\$4,400	\$0	\$0	\$0	\$472	\$304	\$0	\$0	\$0	\$12,216	\$12,216	
027 Groundwater Modeling (Groundwater Modeling)															
Project Management		8											8	\$1,440	
Groundwater Modeling		120	240	440									816	\$99,976	
Task 027 Subtotal Manhours		128	240	440	0	0	0	8	8	0	0	0	824	\$101,416	
Expenses														\$0	
Subcontractor - Driller														\$0	
Subcontractor - Lab														\$0	
Subcontractor - Construction														\$0	
Task 027 Subtotal		\$23,040	\$33,600	\$44,000	\$0	\$0	\$0	\$472	\$304	\$0	\$0	\$0	\$101,416	\$101,416	
Tasks 005-Revision 1, 010-Revision 2, 011-Revision 1, 021-Revision 1, 026-Revision 1, and 027		160	272	746	0	0	0	16	16	0	0	0	1210	\$235,684	
Rates		\$180.00	\$140.00	\$100.00	\$80.00	\$62.00	\$62.00	\$59.00	\$38.00						
Total Cost		\$28,800	\$38,080	\$74,600	\$0	\$0	\$0	\$944	\$608					\$143,032	
Expenses		\$0	\$0	\$2,100	\$0	\$0	\$0	\$0	\$0					\$7,253	
Subcontractor - Driller														\$0	
Subcontractor - Lab														\$0	
Subcontractor - Construction/Survey														\$85,400	
Total Tasks 005-Revision 1, 010-Revision 2, 011-Revision 1, 021-Revision 1, 026-Revision 1, and 027		\$28,800	\$38,080	\$76,700	\$0	\$0	\$0	\$944	\$608	\$85,400	\$0	\$0	\$235,684	\$235,684	

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ATTACHMENT A



ARCADIS U.S., Inc.
2849 Paces Ferry Road
Suite 400
Atlanta
Georgia 30339
Tel 770.431.8666
Fax 770.435.2666

MEMO

To:
David Escude

Copies:
Mike Kladias
John Ellis
Jim Cloonan

From:
Seth Ramaley

Date:
August 9, 2007

ARCADIS Project No.:
LA002656.0001.00019

Subject:
Groundwater Flow and Solute Transport Modeling
Former Vicksburg Chemical Company Site
Vicksburg, Mississippi

The following is a brief discussion of general modeling subtasks for groundwater flow and solute transport modeling to support the remedial technology evaluation for the Former Vicksburg Chemical Company Site located in Vicksburg, Mississippi. The groundwater flow modeling tasks will include the following: (1) data review and development of the conceptual site model; (2) construction and calibration of the groundwater flow model; (3) construction of the solute transport model and remedial scenarios; and (4) documentation.

The objectives of the modeling are:

- Quantify the hydraulic flow and transport characteristics of the upper aquifer
- Estimate the effectiveness of potential remedial alternatives for the control of select target compounds (arsenic, carbon tetrachloride, chloroform, and dinoseb)
- Provide preliminary configurations of remedial alternatives for more effective evaluation, design, and optimization (as needed)

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Task 1. Data Review and Conceptual Site Model

This subtask includes a detailed review of all existing hydrogeologic data and geochemical data available for the site to be used to develop a conceptual model of site conditions. A conceptual model is a narrative description of the groundwater flow system that forms the basis of the numerical model. The conceptual model is based upon a thorough review and organization of available hydrogeologic data, including: (1) well logs and geologic information (including mineralogical composition, if available); (2) water level data; (3) water quality data; (4) analysis of aquifer properties; and (5) precipitation data. The conceptual model must be detailed enough to allow for efficient translation of the physical conditions at the site to the numerical computer model. This task will also involve a literature search to determine attenuation factors and degradation rates for the target compounds.

Task 2: Construction and Calibration of Groundwater Flow Model

The public domain MODFLOW (McDonald and Harbaugh 1988) code will be used to simulate groundwater flow at the Former Vicksburg Chemical Company Site. MODFLOW is widely used in the industry, familiar to regulators, and has the flexibility to handle different inflow and surface water boundary (discharge) conditions found at the Former Vicksburg Chemical Company Site. The groundwater flow model will be developed by translating the descriptive features of the conceptual model into their numerical or mathematical equivalents. The locations of hydrologic boundaries will be translated into numerical boundary conditions at the limits of the model grid. Preference will be given to natural hydrologic boundaries such as groundwater water divides in defining the size of the model.

Based on an initial review of the site data, the model will consist of 3 layers to simulate the movement of groundwater and contaminants beneath the site. The Byram Marl that is located at an elevation range of 45 to 60 ft MSL serves as a confining unit for the water table aquifer and will comprise the base of the model. The model domain is anticipated to extend from the Mississippi River (to the west of the site) to the Bayou east of the site (approximately 2.5 square miles). The model will include the Stout Creek, Hatcher Creek, and site ponds as boundary conditions within the model domain (additional boundary conditions will be added as determined by the CSM).

The groundwater flow calibration will proceed by adjusting hydraulic properties and boundary conditions within reasonable limits to achieve an acceptable match between levels measured in the field and those computed by the model. The limits within which hydraulic parameters may vary are determined through literature review and site-specific measurements (slug tests). Recent site wide water-level measurements will be used in the flow model calibration.

Prior to running the solute transport model remedial scenarios, the calibrated groundwater flow model will be used to evaluate groundwater flow conditions with different configurations of hydraulic barriers and extraction wells and/or recovery trenches to determine the optimal layout of these technologies. This

evaluation will utilize the Modpath pathline tracking code and/or MODALL that utilizes the modflow cell be cell flow files. Modpath works in conjunction with MODFLOW to delineate groundwater flow lines and groundwater travel times. MODALL works in conjunction with MODFLOW to determine the percentage of hydraulic capture.

Task 3. Construction of Solute Transport Model and Remedial Scenarios

Simulating the migration of dissolved constituents in groundwater requires the application of solute transport models. Solute transport models use the velocity field output from flow models to predict the movement of dissolved constituents by simulating the physical processes of advection, dispersion, adsorption, and first order decay. A solute transport model will be developed that uses the results of the calibrated three-dimensional flow model to simulate the future migration of dissolved constituents in the water table aquifer.

For solute transport simulations it will be assumed that there are no continuing sources of contamination (from soils, etc.) and that current observed constituent concentrations will serve as initial concentrations in the model. The MT3D99 computer code will be used for solute transport modeling. MT3D99 is based on the publicly available computer program and well-known MT3DMS transport model. Both versions feature extensive documentation and verification. The code is fully three-dimensional, simulates transport in confined and unconfined flow systems, and can account for hydrodynamic dispersion, adsorption (retardation), and biological degradation or decay in solute transport calculations.

MT3D was chosen for this modeling application because it was designed to be used in conjunction with MODFLOW, which can be used to simulate multi-species degradation (chain decay) of organic species.

The solute transport model scenarios will evaluate the following scenarios or a combination of:

- 1) Baseline Conditions.
- 2) Hot-spot remediation (Simulated as percent reduction in concentration).
- 3) Utilization of a Hydraulic Barrier and extraction wells and/or recovery trench downgradient of the impacted area prior to the bayou discharge point.
- 4) Utilization of a Hydraulic Barrier upgradient of the impacted area.

The solute transport model will be setup to simulate the migration of arsenic, chloroform, carbon tetrachloride, and dinoseb, which are the primary constituents present in groundwater at the Site. The model will not evaluate impacts associated with any other compounds. For all of the simulations, MT3D uses the results from MODFLOW to compute the groundwater flow and velocity terms in transport calculations. Simulation of some compounds will make use of non-linear partitioning between dissolved and adsorbed phases.

Degradation rates for organic species will be determined from review of site groundwater data and select literature sources.

Task 4 Groundwater Flow and Solute Transport Model Report.

A technical memorandum will be prepared that will document all aspects of the modeling effort including the conceptual model, model construction, flow model calibration, and solute transport modeling. This report will document the modeling results through numerous illustrations and figures. The philosophy behind the modeling report and figures is to provide sufficient detail so that an outside reviewer can adequately evaluate the model. In addition to the reporting, this task also includes two internal meetings for the project team to discuss the results of the modeling efforts. The initial meeting would consist of a team planning meeting to establish the framework of the model and the second meeting would consist of a review of the calibrated flow model prior initiation of the solute transport model simulations.

COST

The estimated cost for these tasks is 100,000. A breakdown of the cost is shown in the table below:

Task	Total
Task 1. Site Data Review and Development of Conceptual Site Model	15,000
Task 2. Construction and Calibration of Conceptual Site Model	31,000
Task 3. Solute Transport Model Construction and Remedial Scenarios	19,000
Task 4. Groundwater Flow and Solute Transport Model Report and Meetings	35,000
TOTAL	100,000

Schedule

The following is the anticipated schedule for the groundwater flow and solute transport modeling:

Approval	8/31/07
CSM Development	8/31/07 to 9/14/07

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Planning Meeting to Establish Model Framework	9/17-9/18
Construction and Calibration of Flow Model	9/19 to 10/12
Model Review Meeting	10/15-10/16
Hydraulic Flow Analyses	10/17 to 10/31
Solute Transport Model Scenarios	11/1 to 11/22
Draft Final Report	12/14/07

The dates above are subject to change based on the actual date of the notice to proceed and the total duration of the modeling effort is anticipated to be 4 months.

Work Authorization No. 006c

The attached ARCADIS U.S., Inc., Proposal for Project Related Activities, dated August 7, 2007, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 006. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 026c – Asbestos Disposal and Cooling Tower Demolition (North and South Plants)

- Update the project Health and Safety Plan to include information on asbestos and demolition.
- Abate the asbestos containing portions of the five cooling towers located in the North and South Plants.
- Demolish the five cooling towers.
- Dispose of the asbestos and cooling tower debris in a permitted landfill.
- Provide the Mississippi Department of Environmental Quality (MDEQ) a letter report to document the asbestos disposal and cooling tower demolition activities.

Schedule

- Conduct the demolition and disposal of the cooling towers task contained within this work authorization within 30 days of the execution of this work authorization.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. **Subcontracts** – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure

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that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.

- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$118,935** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

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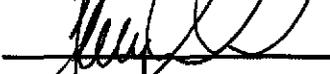
Mississippi Bluffs Industrial Park, LLC

By: 
Paul Bunge

Title: Managing Member

Date: 9/12/07

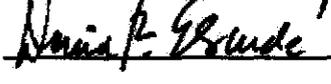
Mississippi Department of Environmental Quality

By: 

Title: Director, O&C

Date: 10/2/07

ARCADIS U.S., Inc.

By: 
David R. Escudé, P.E.

Title: Project Manager

Date: 7 August 2007

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TABLE 1A

Former Vicksburg Chemical Company
Vicksburg, Mississippi

	Task	Manhours	Cost	ARCADIS Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS	026c	256	\$25,812	\$5,123	\$0	\$0	\$88,000	\$118,935
ARCADIS Total		256	\$25,812	\$5,123	\$0	\$0	\$88,000	\$118,935

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Former Vicksburg Chemical Company
Corrective Action Cost Estimate
Vicksburg, Mississippi

Task	Description	Category Personnel:										Expenses	Total Hours	Total				
		Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerical	Subcontractor Expenses								
026c Asbestos Disposal and Cooling Tower Demolition (North and South Plants)												Asbestos Disposal and Cooling Tower Demolition (North and South Plants)						
	Project Management + HASP Update	4	4	16					6				32	\$3,184	17-10 hour days			
	Field Oversight			188									188	\$18,800	17 days in Level D (\$32.50 per day)			17 days vehicle @ \$100/day
	Letter Report	4	8	16					4	4			36	\$3,828	17 days of cell phone (\$10 per day)			1 emp. @ \$100 per day/day
	Task 026c - Subtotal Manhours	8	12	220	0	0	0	4	12	0	0		256		3-6 hr travel			\$1,000 - field exp.
	Expenses			\$1,700										\$3,423				
	Subcontractor - Driller													\$88,000				
	Subcontractor - Lab													\$0				
	Subcontractor - Construction/Survey													\$88,000				
	Task 026c Subtotal	\$1,440	\$1,680	\$23,700	\$0	\$0	\$0	\$236	\$456	\$88,000	\$3,423			\$118,935				
Task 026c		\$0	12	220.0	0	0	0	4	12	\$88,000	\$3,423			\$118,935				
	Rates	\$180.00	\$140.00	\$100.00	\$80.00	\$62.00	\$62.00	\$59.00	\$38.00									
	Total Cost	\$1,440	\$1,680	\$22,000	\$0	\$0	\$0	\$236	\$456					\$26,812				
	Expenses	\$0	\$0	\$1,700	\$0	\$0	\$0	\$0	\$0					\$5,123				
	Subcontractor - Driller									\$0				\$0				
	Subcontractor - Lab									\$0				\$0				
	Subcontractor - Construction/Survey									\$88,000				\$88,000				
Total Task 026c		\$1,440	\$1,680	\$23,700	\$0	\$0	\$0	\$236	\$456	\$88,000	\$0			\$118,935				

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Former Vicksburg Chemical Company
Corrective Action Cost Estimate
Vicksburg, Mississippi

Task	Description	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerical	Subcontractor Expenses	Expenses	Total Hours	Total
026c Asbestos Disposal and Cooling Tower Demolition (North and South Plants)		Asbestos Disposal and Cooling Tower Demolition (North and South Plants)											
Project Management + HASP Update		4	4	16					8			32	\$3,184
Field Oversight				188								188	\$18,800
Letter Report		4	8	16				4	4			36	\$3,828
<i>Task 026c. Subtotal Manhours</i>		8	12	220	0	0	0	4	12	0	0	256	\$25,812
<i>Expenses</i>				\$1,700							\$3,423		\$5,123
<i>Subcontractor - Driller</i>													\$0
<i>Subcontractor - Lab</i>													\$0
<i>Subcontractor - Construction/Survey</i>										\$88,000			\$88,000
Task 026c Subtotal		\$1,440	\$1,680	\$23,700	\$0	\$0	\$0	\$236	\$456	\$88,000	\$3,423		\$118,935
Task 026c		8.0	12	220.0	0	0	0	4	12	\$88,000	\$3,423	256	\$118,935
Rates		\$180.00	\$140.00	\$100.00	\$80.00	\$62.00	\$62.00	\$59.00	\$38.00				
Total Cost		\$1,440	\$1,680	\$22,000	\$0	\$0	\$0	\$236	\$456				\$25,812
Expenses		\$0	\$0	\$1,700	\$0	\$0	\$0	\$0	\$0				\$5,123
<i>Subcontractor - Driller</i>										\$0			\$0
<i>Subcontractor - Lab</i>										\$0			\$0
<i>Subcontractor - Construction/Survey</i>										\$88,000			\$88,000
Total Task 026c		\$1,440	\$1,680	\$23,700	\$0	\$0	\$0	\$236	\$456	\$88,000	\$0		\$118,935

Asbestos Disposal and Cooling Tower Demolition (North and South Plants)
 Field Expenses
 17-10 hour days
 17 days in Level D (\$32.50 per day)
 17 days of cell phone (\$10 per day)
 3-6 hr travel
 17 days vehicle @ \$100/day
 1 emp. @ \$100 per diem/day
 \$1,000 - field exp.
Subcontractor Expenses
 RLC Environmental: \$80,000 (includes disposal) + 10% markup (17 days)

Work Authorization No. 005

The attached ARCADIS U.S., Inc., Proposal for Project Related Activities, dated July 3, 2007, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 005. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 025 – Tank Cleaning (North Plant and South Plant)

- Conduct cleaning of tanks located in the North Plant and South Plant. Tank cleaning shall be limited to removal of product and triple rinsing each tank.
- Containerize and dispose of hazardous and non-hazardous contents and wash waters generated during tank cleaning activities.

Schedule

- Conduct the tank cleaning task contained within this work authorization within 75 working days of the execution of this work authorization.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. **Subcontracts** – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed

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price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.

- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$948,336** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

ARCADIS

Mississippi Bluffs Industrial Park, LLC

By: _____

Paul Bunge

Title: Managing Member

Date: _____

**Mississippi Department of Environmental
Quality**

By: _____

Title: DIRECTOR OR

Date: 7/6/07

ARCADIS U.S., Inc.

By: David R. Escudé

David R. Escudé, P.E.

Title: Project Manager

Date: 3 July 2007

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TABLE 1A

Former Vicksburg Chemical Company
Vicksburg, Mississippi

	Task	Manhours	Cost	ARCADIS Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS	025	986	\$103,116	\$13,000	\$0	\$0	\$832,220	\$948,336
ARCADIS Total		986	\$103,116	\$13,000	\$0	\$0	\$832,220	\$948,336

TABLE 5A

Vicksburg Cost Estimate
07/20/17
Work Authorization 995

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Former Vicksburg Chemical Company
Comprehensive Remedial Cost Estimate
Vicksburg, Mississippi

Task	Description	Category Parameter:	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerk	Subcontractor Expenses	Expenses	Total	Total
995 Task Cleanup (North Plant & South Plant)														
														(Task Cleanup - North Plant & South Plant) Subtotal
	Project Management		00.0		114.3								174.3	\$23,894 85-10 hour days + 10% contingency
	Field Oversight				807.0					4			811.0	\$99,888 6 hours travel per week + 10% contingency
	Task 032, Subtotal Manhours		86.8	0	921.8	0	0	0	0	4	0	0	997.6	\$145,176
	Expenses				38,500							\$6,000		\$13,988
	Subcontractor - Driller													\$0
	Subcontractor - Lab													\$0
	Subcontractor - Construction/Survey													\$0
	Task 995 Subtotal		\$10,800	\$0	\$99,064	\$0	\$0	\$0	\$0	\$152	\$832,220	\$6,000	\$832,220	\$832,220
	Task 995		86.8	0	921.8	0	0	0	0	4	0	0	997.6	\$145,176
	Rate		\$160.00	\$140.00	\$100.00	\$60.00	\$62.00	\$62.00	\$36.00	\$36.00				
	Total Cost		\$10,800	\$0	\$99,184	\$0	\$0	\$0	\$0	\$152				\$145,176
	Expenses		\$0	\$0	\$8,500	\$0	\$0	\$0	\$0	\$0		\$0		\$13,988
	Subcontractor - Driller											\$0		\$0
	Subcontractor - Lab											\$0		\$0
	Subcontractor - Construction/Survey											\$0		\$0
	Total Task 995		\$10,800	\$0	\$99,064	\$0	\$0	\$0	\$0	\$152	\$832,220	\$0	\$832,220	\$832,220

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Work Authorization No. 004

The attached ARCADIS U.S., Inc., Proposal for Project Related Activities, dated April 24, 2007, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 004. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 007-Revision 1 – Storm Water Pond Discharge

- Conduct six monthly storm water pond discharge events beginning in May 2007 and continuing through October 2007. This task assumes that no storm water treatment is necessary prior to discharge.

Task 019-Revision 1 – Additional TCLP Tank Sampling

- Collect 36 samples of material that represent that contents of the tanks that MS Bluffs is responsible for;
- Analyze the samples by the Toxicity Characteristic Leaching Procedure; and
- Determine the path forward for tank cleaning activities.

Task 019-Revision 2 – Drum Crushing

- Crush empty drums in the consolidated drum area;
- Load and transport the drums to a permitted disposal facility; and
- Dispose of the crushed drums.

Task 019-Revision 3 – Oily Water Disposal from Tall Oil Tank and Drums

- Recover up to 10,000 gallons of oily water from the site with a vacuum truck. The recovery effort will focus on the material contained in the Tall Oil Tank and drums; and
- Dispose of the recovered water at a permitted disposal facility.

Task 020 – Removal of Material from Buildings

- Removal of all material that Harcros does not want to retain from buildings located at the site, mainly paper, wood, and plastic products;

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- Consolidate paper, wood, and plastic debris from onsite buildings and containerize in roll-off dumpsters or equivalent for disposal; and
- Prepare containers for future transport and disposal.

Task 021 – Hazardous Waste Characterization and Packing

- Categorize and segregate hazardous and non-hazardous waste located at the site, including compressed gas cylinders. The main areas of concern that will be addressed are the former analytical laboratory and satellite laboratories near the former process units; and
- Containerize the material for future transport and disposal.

Task 022 – Spent Carbon Disposal

- Collect the spent carbon contained in the 6 carbon vessels located in the South Plant; and
- Transport the spent carbon to a disposal facility or regeneration facility.

Task 023 – Drainage Plan

- Prepare a drainage plan for the site. This drainage plan will encompass the areas of the site that will be affected by, or have the potential to affect, site remedial activities; and
- Submit two copies of the drainage plan to MDEQ.

Schedule

- Conduct all tasks contained within this work authorization except Task 007-Revision 1 within 60 days of the execution of this work authorization; and
- Conduct the storm water discharge events in Task 007-Revision 1 for a period of 6 months (May 2007 to October 2007).

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. Subcontracts – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure

ARCADIS

that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.) In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.

- B. Travel – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies – Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

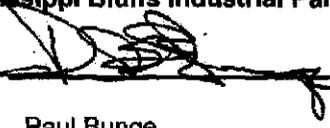
The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$253,688** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

ARCADIS

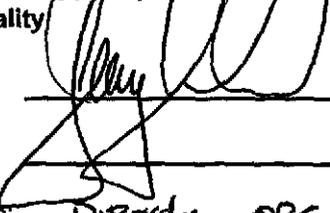
Mississippi Bluffs Industrial Park, LLC

By: 
Paul Bunge

Title: Managing Member

Date: 25 April 2007

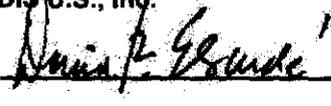
Mississippi Department of Environmental Quality

By: 

Title: Director OPC

Date: 4/27/07

ARCADIS U.S., Inc.

By: 
David R. Escudé, P.E.

Title: Project Manager

Date: 25 April 2007

ARCADIS

TABLE 1A

**Former Vicksburg Chemical Company
Vicksburg, Mississippi**

	Task	Manhours	Cost	ARCADIS Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS	007-Revision 1	32	\$3,680	\$0	\$0	\$0	\$5,940	\$9,620
	019-Revision 1	140	\$13,470	\$2,771	\$0	\$26,136	\$22,763	\$65,140
	019-Revision 2	56	\$5,112	\$1,100	\$0	\$0	\$10,657	\$16,869
	019-Revision 3	38	\$3,272	\$900	\$0	\$0	\$13,920	\$18,092
	020	102	\$8,792	\$2,771	\$0	\$0	\$25,289	\$36,852
	021	92	\$7,992	\$2,368	\$0	\$0	\$27,808	\$38,168
	022	76	\$6,712	\$1,500	\$0	\$0	\$36,823	\$45,035
	023	216	\$22,912	\$1,000	\$0	\$0	\$0	\$23,912
ARCADIS Total		752	\$71,942	\$12,410	\$0	\$26,136	\$143,200	\$253,688

TABLE 1A

Vicksburg Civil Engineer
SAC/SST
Work Authorization 994

ARCADIS

Former Vicksburg Chemical Company
Comprehensive Remedial Investigation
Vicksburg, Mississippi

Task	Description	Category	Personnel	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Inv. Scientist 1	Engineer Technician	CADD Operator	Admin/ Clerical	Subcontractor Expenses	Expenses	Total	Total	
007-Revision 1 Storm Water Pond Discharge																
	Project Management			4	4	24								32	\$3,960	
	Task 007-Revision 1 Subtotal			4	4	24	8	0	0	0	0	0	0	32	\$3,960	
	Task 007-Revision 1 Subtotal			\$170	\$640	\$2,090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,960	
018-Revision 1 Additional TCEP Task Activities																
	Project Management			4	4	8								74	\$2,680	
	TCEP Sampling			4	15	6	12			2	4			124	\$11,300	
	Task 018-Revision 1 Subtotal			8	20	24	24	0	0	2	4	0	0	148	\$13,470	
	Task 018-Revision 1 Subtotal			\$1,460	\$2,800	\$2,400	\$1,240	\$0	\$0	\$110	\$180	\$0	\$0	\$2,071	\$13,470	
019-Revision 2 Storm Creekbed																
	Project Management			4	4	0								15	\$2,860	
	Field Oversight			4	4	0	26				4			40	\$3,837	
	Task 019-Revision 2 Subtotal			4	4	0	26	0	0	0	4	0	0	56	\$6,112	
	Task 019-Revision 2 Subtotal			\$720	\$640	\$0	\$1,180	\$0	\$0	\$0	\$150	\$0	\$0	\$1,970	\$6,112	
019-Revision 3 City Water Removal from The Old Tank and Dumps																
	Project Management			2	2	4								8	\$1,840	
	Field Oversight			2	2	4	26				4			30	\$2,232	
	Task 019-Revision 3 Subtotal			2	2	4	26	0	0	0	4	0	0	38	\$3,272	
	Task 019-Revision 3 Subtotal			\$300	\$280	\$400	\$2,240	\$0	\$0	\$0	\$150	\$0	\$0	\$2,770	\$3,272	
020 Removal of Material from Buildings and Disposal Pits																
	Project Management			4	4	8								12	\$2,880	
	Field Oversight			4	4	8	32				4			48	\$6,712	
	Task 020 Subtotal			4	4	8	32	0	0	0	4	0	0	102	\$9,192	
	Task 020 Subtotal			\$720	\$680	\$800	\$1,280	\$0	\$0	\$0	\$150	\$0	\$0	\$2,071	\$9,192	
021 Stormwater Collection and Paving																
	Project Management			4	4	8								74	\$2,680	
	Field Oversight			4	4	8	22				4			78	\$3,912	
	Task 021 Subtotal			4	4	8	22	0	0	0	4	0	0	92	\$7,292	
	Task 021 Subtotal			\$720	\$680	\$800	\$9,240	\$0	\$0	\$0	\$150	\$0	\$0	\$1,750	\$27,860	
022 Storm Drainage Removal																
	Project Management			4	4	8								12	\$2,880	
	Field Oversight			4	4	8	26				4			48	\$3,837	
	Task 022 Subtotal			4	4	8	26	0	0	0	4	0	0	76	\$6,712	
	Task 022 Subtotal			\$720	\$680	\$800	\$4,440	\$0	\$0	\$0	\$150	\$0	\$0	\$1,970	\$12,860	
023 Drainage Pits																
	Project Management			4	4	8								12	\$2,880	
	Report			4	4	8	40				4			24	\$2,812	
	Task 023 Subtotal			8	8	16	40	0	0	4	4	0	0	216	\$5,292	
	Task 023 Subtotal			\$8,040	\$8,140	\$6,500	\$3,200	\$0	\$0	\$150	\$0	\$0	\$1,900	\$0	\$23,912	
Tasks 007-Revision 1, 018-Revision 1, 019-Revision 2, 019-Revision 3, and 020 through 023																
	Rate			\$180.00	\$146.00	\$100.00	\$60.00	\$60.00	\$67.00	\$68.00	\$38.00	\$0.00	\$0.00	\$0.00	\$72.00	\$23,280
	Total Cost			\$19,440	\$12,040	\$14,400	\$31,870	\$0	\$0	\$2,478	\$1,064	\$0	\$0	\$0	\$79,842	
	Expenses			\$0	\$0	\$0	\$2,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,410	
	Subcontractor - Drive											\$0	\$0	\$0	\$0	
	Subcontractor - Lab											\$26,138	\$0	\$26,138		
	Subcontractor - Construction/Utility											\$143,225	\$0	\$143,225		
Total Tasks 007-Revision 1, 018-Revision 1, 019-Revision 2, 019-Revision 3, and 020 through 023																
				\$19,440	\$12,040	\$14,400	\$34,070	\$0	\$0	\$2,478	\$1,064	\$148,128	\$0	\$0	\$245,466	



Trey Hess/HW/OPC/DEQ
03/22/2007 02:55 PM

To "Escude, David"
<David.Escude@arcadis-us.com>@INETDEQ
cc Trey_Hess@deq.state.ms.us
bcc
Subject Re: Work Authorization #3 (revision for SWMU 2
sampling).xls

I concur.

TREY

Jere "Trey" Hess, P.E., BCEE
MS Brownfields Program Coordinator
MS Dept. of Environmental Quality
101 W. Capitol Street (39201)
P.O. Box 10385
Jackson, MS 39289-0385
(601) 961-5654
(601) 961-5300 (FAX)
<http://www.brownfields.ms>

"Escude, David" <David.Escude@arcadis-us.com>



"Escude, David"
<David.Escude@arcadis-us.c
om>
03/21/2007 10:23 AM

To <Trey_Hess@deq.state.ms.us>,
<pbunge@silvertipprojects.com>
cc "Derouen, Craig" <Craig.Derouen@arcadis-us.com>
Subject Work Authorization #3 (revision for SWMU 2 sampling).xls

Trey/Paul

Attached is a spreadsheet showing the additional cost to perform the SWMU 2 geotechnical work. The original contractor realized that he made an error in pricing the work and backed out. We contacted several other geotechnical firms to obtain quotes and received only 2 interested parties. There are not a whole lot of companies interested in doing both geotechnical and environmental sampling. We have scheduled the work for next week. Please let me know if you concur with the revised estimates so that we can keep moving.

Thanks

David R. Escude', P.E.
Associate Vice President/SER Business Practice Manager
ARCADIS
10352 Plaza Americana Drive
Baton Rouge, Louisiana 70816
Office 225.292.1004
Direct 225.218.9672 Ext. 245

Fax 225.218.9677

>Please note that my e-mail address has changed to
David.Escude@arcadis-us.com

>
>

<<Work Authorization #3 (revision for SWMU 2 sampling).xls>>

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and its affiliates. Work Authorization #3 (revision for SWMU 2 sampling).xls

Mississippi Bluffs
 Vicksburg, Louisiana
 LA002656.0001.00016

Revision to Task 016 - SWMU 2 Slope Stability Sampling of Work Authorization 3

Table 1. Revised Drilling and Sampling Tasks

Item	Previous Amount from Original Bid (Soil Testing Engineers)	Revised Amount from Bid 1 (Walker-Hill)*	Revised Amount from Bid 2 (Layne Western)	Revised Amount from Bid 1 (Burns Cooley Dennis + Pace)*
Subcontractor - Driller	\$35,965	\$80,651	\$84,420	-
Subcontractor - Lab	\$11,044	-	-	\$21,164

* Bids that will be executed.

Table 2. Revised Totals

	Previous Total	Revised Total	Increase
Task 016 Subtotal	\$85,889	\$140,695	\$54,807
Work Authorization #3	\$507,212	\$562,019	\$54,807

Work Authorization No. 003

The attached ARCADIS U.S., Inc., Proposal for Project Related Activities, dated January 23, 2007, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 003. This Work Authorization is entered into by and between ARCADIS U.S., Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 012 – Soil Sampling

- Install 21 probeholes to a depth of 12 feet below land surface (bls) for the collection of soil samples. The borings will be advanced by a water well contractor licensed by the State of Mississippi;
- Continuous soil samples will be evaluated in the field by ARCADIS personnel;
- Collect soil samples from the following intervals: 0-2 ft bls, 2-4 ft bls, and the interval most likely to contain high concentrations of chemicals of concern based on the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) data and in accordance with the soil sampling plan;
- Soil samples will be collected and submitted to an accredited analytical laboratory for the parameter set presented in the *Site Baseline Sampling Work Plan*, once approved by MDEQ;
- Each probehole will be abandoned by completely filling the probehole with a 95% Portland cement-5% bentonite slurry in accordance with procedures contained in the Mississippi Department of Environmental Quality's (MDEQ's) *Minimum Specifications for Drilling Services* dated July 1, 2005; and
- Include the results of data generated during the completion of this task in a Site Characterization Report.

Task 013 – Groundwater Sampling

- Collect groundwater samples from the approximately 37 existing monitor wells;
- Collect appropriate Quality Assurance/Quality Control (QA/QC) samples;
- Analyze the collected samples and purged groundwater for the analytical parameter set presented in the *Site Baseline Sampling Work Plan*, once approved by MDEQ; and
- Include the results of data generated during the completion of this task in a Site Characterization Report.

Task 014 – Storm Water Sampling

- Collect 16 storm water samples during a rain event of sufficient intensity and duration to collect sheet flow samples;
- Collect four storm water basin/pond samples and two sump samples;
- Collect the appropriate QA/QC samples;
- Analyze the collected samples for the analytical parameter set presented in the *Site Baseline Sampling Work Plan*, once approved by MDEQ; and
- Include the results of data generated during the completion of this task in a Site Characterization Report.

Task 015 – Solidification/Stabilization Study

- Collect 6 solidification, 18 stabilization, and 6 control samples from hotspot and sludge locations shown in the *Solidification/Stabilization Treatability Study Work Plan*. Each sample shall consist of 10 gallons of material;
- Submit the samples to analytical and geotechnical laboratories for analysis;
- Conduct a treatability study based on the results of the laboratory analyses to evaluate solidification and stabilization of these materials in accordance with the *Solidification/Stabilization Treatability Study Work Plan*; and
- Prepare a letter report of the solidification/stabilization treatability study findings.

Task 016 – Solid Waste Management Unit (SWMU) 2 Stability Sampling

- Install 11 borings and collect stability samples from Boring Locations B-1 through B-11 in accordance with the *SWMU 2 Slope Stability Work Plan*;
- Install three borings for the purpose of waste characterization from Boring Locations B-12 through B-14 in accordance with the *SWMU 2 Slope Stability Work Plan*;
- Install four borings to the Byram Marl layer approximately 60 ft bls at locations to be determined in the field. The borings will be labeled Borings B-15 through B-18 and sampled in accordance with the *SWMU 2 Slope Stability Work Plan*;
- Submit the samples to a geotechnical laboratory for analysis;
- Conduct a stability study based on the results of the laboratory analyses to determine the slope stability and the ability of SWMU 2 to support additional material; and
- Prepare a letter report of the stability study findings.

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Task 017 – Survey

- Conduct a survey to provide coordinates for the soil, storm water, solidification, stabilization, and stability samples collected in Tasks 012, 014, 015, and 016;
- Conduct a survey of the North Plant Pond to gather data for the generation of a volume estimate of material in the North Plant Pond; and
- Conduct a topographic survey of SWMU 2.

Task 018 – Site Characterization Report

- Prepare a site characterization report to present the data collected in Tasks 012, 013, and 014.

Task 019 – Housekeeping

- Load and remove bricks from the North Plant Pond area and concrete rubble piles west of the southernmost warehouse in the South Plant area. Dispose of material in a construction and demolition landfill;
- Excavate the underground drain located west of the southernmost warehouse in the South Plant from the sinkhole to the discharge location of the underground pipe. Work will be conducted to remove the threat of collapse in the sinkhole area and to promote drainage in this area;
- Repair the areas of erosion on the Solidified Waste Containment Area (SWCA) landfill cover;
- Provide labor for the consolidation of drums into one centralized location;
- Install approximately 370 linear feet of 6 feet high chain-link fence with two access gates around the existing parking lot northeast of the laboratory;
- Install berm or equivalent for secondary containment within fenced parking lot;
- Collect 17 samples from on-site tanks (10 tanks in the South Plant, 7 tanks in the North Plant) and two samples from on-site carbon vessels. Analyze the samples by the Toxicity Characteristic Leaching Procedure;
- Drain the water located in the berms built onto SWMU 2 into the storm water ponds;
- Recycle recoverable liquid substances stored in drums;
- Use a colloidal borescope and/or conduct slug and/or pump tests to determine hydraulic conductivity; and
- Conduct storm water discharge events through April 25, 2007.

Schedule

- Submit two hard copies of a report with the results of the soil (Task 012), groundwater (Task 013), and storm water (Task 014) sampling efforts addressing all elements of Task 018 within 30 days of the receipt of all final analytical data;

ARCADIS

- Conduct solidification/stabilization sampling activities addressing the field sampling elements of Task 015 of this Work Order to be completed within 45 days of the execution date of this Work Order. Submit two hard copies of a letter report detailing the findings of the solidification/stabilization treatability study within 30 days of the receipt of all final analytical data;
- Conduct SWMU 2 stability sampling activities addressing the field sampling elements of Task 016 of this Work Order to be completed within 45 days of the execution date of this Work Order. Submit two hard copies of a letter report detailing the findings of the SWMU 2 stability study within 30 days of the receipt of all final geotechnical data; and
- Conduct the general housekeeping field activities detailed in Task 019 within 60 days of the execution date of this Work Order, with the exception of the storm water discharge events which will proceed through April 25, 2007.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- Subcontracts** – All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.
- Travel** – Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- Laboratory Analyses** – Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.

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FEB - 6 2007
MDEQ-060

- D. Purchase of Equipment/Non-Expendable Supplies -- Reimbursement for the purchase of equipment/ non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/ non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.

- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is \$507,212 and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

Mississippi Bluffs Industrial Park, LLC

By: [Signature]
PAUL BUNGE

Title: MANAGING MEMBER

Date: 1/27/07

Mississippi Department of Environmental Quality

By: [Signature]

Title: DIRECTOR

Date: 2/10/07

ARCADIS U.S., Inc.

By: [Signature]
David R. Escudé

Title: Project Manager

Date: 23 January 2007

ARCADIS

TABLE 1A

Vicksburg Chemical Company
Vicksburg, Mississippi

Task	Manhours	Cost	Expenses	Driller Expenses	Lab Expenses	Construction/ Survey Expenses	Total
ARCADIS 012	170	\$13,958	\$2,922	\$12,232	\$39,105	\$0	\$68,217
013	266	\$24,566	\$11,509	\$0	\$32,318	\$0	\$68,393
014	94	\$8,594	\$1,225	\$0	\$17,226	\$0	\$27,045
015	212	\$21,496	\$2,125	\$12,782	\$65,525	\$0	\$101,928
016	360	\$35,480	\$3,400	\$35,965	\$11,044	\$0	\$85,889
017	54	\$5,156	\$1,100	\$0	\$0	\$5,500	\$11,756
018	284	\$25,480	\$1,000	\$0	\$0	\$0	\$26,480
019	246	\$21,424	\$11,400	\$0	\$13,794	\$70,887	\$117,505
ARCADIS Total	1686	\$156,154	\$34,681	\$60,979	\$179,012	\$76,387	\$507,212

TABLE 1A

ABC APIS

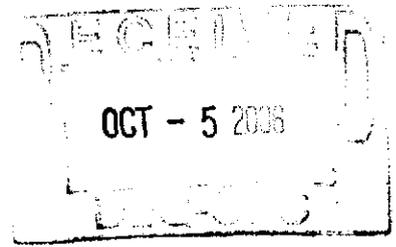
Victoria Chemical Company
 Corrective Action Cost Estimate
 Victoria, Minnesota

Industry Cost Estimate
 11/2007
 Work Authorization #02

Task Description	Category Personnel	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Exp. Technician	CADD Operator	Admin/Chemist	Subcontractor Exp.	Expenses	Total	Total
012 Soil Remediation													
Project Management		4	16	16	50	56		2	16			4	670
Soil Sampling		4										196	\$13,238
Task 012 Subtotal		8	16	16	50	56	0	2	16	0	0	178	\$13,808
Expenses					5500	5500				\$12,232	\$1,922		\$23,032
Subcontractor - Driller										\$36,108			\$36,108
Subcontractor - Lab													0
Subcontractor - Construction													0
Task 012 Subtotal		\$1,440	\$2,240	\$1,600	\$4,980	\$1,072	0	\$116	\$488	\$31,337	\$1,922		\$46,237
013 Groundwater Remediation													
Project Management		4										4	\$728
Groundwater Sampling		4	18	112	112			2	16			267	\$43,446
Task 013 Subtotal		8	18	112	112			2	16			271	\$44,174
Expenses		\$200	\$200	\$200	\$2,000	0	0	0	0	\$6,808			\$11,008
Subcontractor - Driller										\$32,318			\$32,318
Subcontractor - Lab													0
Subcontractor - Construction													0
Task 013 Subtotal		\$1,640	\$2,440	\$11,400	\$10,000	0	0	\$116	\$408	\$32,318	\$6,808		\$63,282
014 Storm Water Remediation													
Project Management		4										4	\$728
Storm Water Sampling		4	16	8	28	20		2	8			90	\$7,274
Task 014 Subtotal		8	16	8	28	20		2	8			94	\$8,002
Expenses					\$200	\$200					\$425		\$1,325
Subcontractor - Driller													0
Subcontractor - Lab													0
Subcontractor - Construction										\$17,226			\$17,226
Task 014 Subtotal		\$1,640	\$2,240	\$800	\$2,200	\$1,412	0	\$116	\$304	\$17,226	\$425		\$27,263
015 Subsurface Investigation Study													
Project Management		8										8	\$1,440
Subdriller/Block/Block Sampling		4	4	36	36							120	\$13,284
Letter Report		4	24	40								84	\$5,368
Task 015 Subtotal		12	28	76	76							210	\$20,100
Expenses				\$500	\$500	0	0	0	0	\$1,125			\$2,125
Subcontractor - Driller										\$12,782			\$12,782
Subcontractor - Lab										\$85,525			\$85,525
Subcontractor - Construction													0
Task 015 Subtotal		\$2,160	\$4,480	\$10,100	\$4,200	0	0	\$472	\$304	\$79,307	\$1,125		\$101,258
016 Storm & Sewer Stability Assessment Investigation Study													
Project Management		8										8	\$1,440
Preparation Site Visit		12		12								24	\$3,288
Stability Sampling		4		112	112							224	\$20,160
Letter Report		8	24	40								104	\$70,820
Task 016 Subtotal		28	24	184	112							360	\$35,608
Expenses				\$700	\$700	0	0	0	0	0	\$2,000		\$3,400
Subcontractor - Driller										\$30,383			\$30,383
Subcontractor - Lab										\$11,044			\$11,044
Subcontractor - Construction/Survey													0
Task 016 Subtotal		\$8,240	\$3,280	\$17,100	\$8,200	0	0	\$1,116	\$304	\$47,979	\$2,000		\$68,209
017 Hazards													
Project Management		4										4	\$728
Hazard Oversight		2	8	4	20							30	\$4,408
Task 017 Subtotal		6	8	4	20							34	\$5,136
Expenses					\$300	0	0	0	0	0	\$600		\$1,600
Subcontractor - Driller													0
Subcontractor - Lab													0
Subcontractor - Construction/Survey										\$5,506			\$5,506
Task 017 Subtotal		\$1,000	\$580	\$400	\$3,100	0	0	\$236	\$0	\$5,506	\$600		\$11,122
018 Site Characterization Report													
Report on Tasks 001, 002, and 003 activities		24	40	80	40	48		40	40			794	\$20,408
Task 018 Subtotal		24	40	80	40	48	0	40	40	0	0	254	\$20,408
Expenses										\$1,000			\$1,000
Subcontractor - Driller													0
Subcontractor - Lab													0
Subcontractor - Construction/Survey													0
Task 018 Subtotal		\$4,200	\$5,800	\$9,000	\$3,200	\$4,480	0	\$2,240	\$1,520	0	\$1,000		\$20,408
019 Remediation													
Project Management		4										4	\$728
Remediation Oversight		4	16	16	136							242	\$30,704
Task 019 Subtotal		8	16	16	136							246	\$31,432
Expenses					\$1,800	0	0	0	0	0	\$4,800		\$6,600
Subcontractor - Driller													0
Subcontractor - Lab													0
Subcontractor - Construction/Survey										\$13,784			\$13,784
Task 019 Subtotal		\$1,640	\$1,240	\$1,800	\$17,400	0	0	0	\$204	\$14,681	\$4,800		\$37,925
Task 012, 013, 014, 015, 016, 017, 018, 019, and Remedial Monitoring													
Notes		102	164	476	476	102	0	62	104	0	0	1068	
Total Cost		\$140,000	\$140,800	\$180,000	\$80,800	\$42,000	\$62,000	\$68,000	\$38,000	\$3,000	\$0		\$196,104
Expenses		\$200	\$200	\$1,400	\$5,800	\$700	0	0	0				\$34,800
Subcontractor - Driller										\$170,807			\$170,807
Subcontractor - Lab													\$78,287
Subcontractor - Construction/Survey													\$78,287
Total Tasks 012, 013, 014, 015, 016, 017, 018, 019, and Remedial		\$141,560	\$143,140	\$181,800	\$86,600	\$42,704	0	\$4,636	\$3,902	\$0	\$0		\$197,212

ESCROW AGENT FOR REMEDIATION ACCOUNT

Name: Sandy Carter Jr.
Firm: Trustmark National Bank
Address: 248 E Capitol St
City, State, Zip: Jackson MS 39201
Address: P O Box 291
City, State, Zip: Jackson, MS 39205-0291
Telephone: (601) 208-2347
Fax: (601) 208-6383
E-mail: scarter@trustmark.com
Status: Inactive
Admit Date: 10/01/1986



Work Authorization No. 002

The attached ARCADIS G&M, Inc., Proposal for Initial Project Related Activities, dated 3 October, 2006, for the Vicksburg Chemical Company Site in Vicksburg, Mississippi, shall be Work Authorization No. 002.

This Work Authorization is entered into by and between ARCADIS G&M, Inc., a Delaware corporation ("Consultant"), and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the Professional Services Agreement entered into by the Parties dated October 25, 2005 ("Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 001 – Conduct a Drum Inventory

- Compile a listing of the number and types of 55-gallon drums that are visible above ground level;
- Compile a listing of the locations of drums using a handheld global positioning system device;
- Compile a listing of drum contents based on legible labeling affixed to each drum;
- Compile a listing of the estimated volume of contents remaining in each drum, if discernable;
- Review old files for Material Data Safety Sheets for the drums with labels;
- Drums will not be opened during this inventory exercise. Drums with unknown contents may be opened for characterization sampling during a separate future event using Level B Personal Protective Equipment; and
- Compose a letter report with the results of the drum inventory effort.

Task 002 – Clearing

- Select a clearing contractor;
- Attend one meeting at the site;
- Clear the site in accordance with the clearing specifications provided in the bid documents; and
- Provide for on-site project oversight.

Task 003 – Survey Monitor Well and Piezometer Locations

- Provide coordinates for the approximately 34 monitor well and piezometer locations in the project area; and
- Provide top of casing and land surface elevation measurements for each monitor well and piezometer.

Task 004 – Develop a Workplan for Baseline Sampling (Soil, Groundwater, and Storm Water)

- Review previously submitted data to determine historical contaminant boundaries;
- Provide for the problem definitions and descriptions related to hotspot soil, groundwater, and storm water issues;
- State soil, groundwater, and storm water sampling objectives and criteria;
- Review historical documents to determine areas requiring additional spatial delineation for remediation purposes;
- Determine analytical parameter sets for soil, groundwater, and storm water sampling. Storm water sampling will include sampling of collection sumps;
- Identify sampling requirements, including field program, sample handling and custody, and analytical program to complete spatial delineation for remediation purposes; and
- Develop a Workplan for the collection and analysis of soil and groundwater samples in accordance with Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) procedures.

Task 005 – Develop a Workplan for Solidification/Stabilization Treatability Study

- Provide for the problem definition and description related to pond sludges and other areas requiring solidification and/or stabilization (S/S);
- State objectives and criteria of S/S;
- Propose possible amendments to achieve S/S objectives; and
- Identify sampling requirements, including field program, sample handling and custody, and analytical/geotechnical program for S/S purposes; and
- Develop a Workplan for the S/S of pond sludges and other areas.

Task 006 – Develop a Workplan to Evaluate SWMU2 Stability

- Provide for the problem definition and description related to the stability of Solid Waste Management Unit 2 (SWMU2) and its ability to support addition material;
- State SWMU2 stability objectives and criteria;
- Review historical documents to determine present landfill construction;
- Identify sampling requirements, including field program, sample handling and custody, and geotechnical program to evaluate slope stability; and
- Develop a Workplan for the collection, analysis, and evaluation of geotechnical samples in accordance with QAPP and HASP procedures.

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Task 007 – Storm Water Management

- Conduct two events to pump out the storm water impoundment basin; and
- Assumes no storm water treatment is necessary prior to discharge.

Task 008 – Grounds Improvement/Mobile Office Rental

- Conduct grounds improvement in the vicinity of the access gate;
- Mobile office trailer rental for a period of one year; and
- Portable toilet rental, including service once per week, for a period of one year.

Schedule

- Submit two hard copies of a letter report with the results of the drum inventory efforts addressing all elements of Task 001 within 14 days of the execution date of this Work Order;
- Conduct clearing activities addressing all elements of Task 002 of this Work Order to be completed in 90 days of the execution date of this Work Order;
- Conduct onsite survey activities within 21 days of the completion of Task 002;
- Submit two hard copies of a Workplan for Baseline Sampling addressing all elements of Task 004 within 30 days of the execution date of this Work Order;
- Submit two hard copies of a Workplan for a Pond S/S Treatability Study addressing all elements of Task 005 of this Work Order to be delivered to the Mississippi Department of Environmental Quality (MDEQ) within 30 days of the execution date of this Work Order;
- Submit two hard copies of a Workplan to evaluate SWMU2 stability addressing all elements of Task 006 of this Work Order to be delivered to MDEQ within 45 days of the execution date of this Work Order;
- Conduct two events to pump out the storm water impoundment basin; and
- Present MDEQ with a scope(s) of work for additional work activities, if necessary.

Compensation for Services

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). The attached Cost Estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

ARCADIS

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. Subcontracts - All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant.). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment vendor or subcontractor invoices are subject to no more than a 10 percent markup of actual invoice or actual cost by Consultant.
- B. Travel - Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule, or as authorized by MDEQ.
- C. Laboratory Analyses - Maximum analytical turnaround time shall be 3 weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. Purchase of Equipment/Non-Expendable Supplies - Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such equipment/non-expendable supplies shall remain the property of the Client and must be returned upon task completion, unless MDEQ determines that the equipment/non-expendable supplies are critical to protection of human health and the environment. In this case, the Client and MDEQ shall determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.
- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

The Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$398,365** and is itemized in the attached ARCADIS Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to the Consultant will not exceed 115 percent of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of the Client and MDEQ. The Consultant must keep track of costs throughout the period of performance of this Work Authorization and must notify the Client and MDEQ immediately upon discovery

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that the work is projected to exceed the maximum amount payable under this Work Authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of this Work Authorization with approval of the Client and MDEQ.

The Consultant's Fee Schedule (Attachment 1.2) is attached.

The Consultant's Cost Estimate (Table 1A) is attached.

Mississippi Bluffs Industrial Park, LLC

By: [Signature]
Paul Bunge

Title: Managing Member

Date: 10/4/06

ARCADIS B&M, Inc/

By: [Signature]
David R. Escudé, P.E.

Title: Associate Vice President/Principal Engineer

Date: 3 October 2006

Mississippi Department of Environmental Quality

By: [Signature]
~~Jerry Cain, P.E. DOEE~~ JERRY CAIN

Title: MS Brownfields Program Coordinator MDEQ-OPC DIRECTOR

Date: 10/6/06

TABLE 1A

Vicksburg Chemical Company
Vicksburg, Mississippi

	Task	Manhours	Cost	Expenses	Total
ARCADIS	1	104	\$8,660	\$1,700	\$10,360
	2	648	\$58,400	\$235,009	\$293,409
	3	116	\$10,512	\$8,100	\$18,612
	4	232	\$21,720	\$500	\$22,220
	5	160	\$17,072	\$500	\$17,572
	6	168	\$18,512	\$500	\$19,012
	7	48	\$4,640	\$4,440	\$9,080
	8	4	\$400	\$7,700	\$8,100
ARCADIS Total		1480	\$139,916	\$258,449	\$398,365

TABLE 1A

Vicksburg Cost Estimate
100306
Work Authorization 001

Vicksburg Chemical Company
Corrective Action Cost Estimate
Vicksburg, Mississippi

Task	Description	Category Personnel	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Egr. Technician	CADD Operator	Admin/Clerical	Subcontractor Exp	Expenses	Total	Total
1.A Conduct a Drum Inventory														
	Project Management		4										4	\$720
	Drum Inventory					30	30						60	\$4,260
	File Review and Labor Report		4	4	16		8			8			40	\$3,680
	Task 1 Subtotal Manhours		8	4	16	30	38	0	0	8	0	0	106	\$8,660
	Subtotal Expenses					\$300	\$2,650	\$0	\$0	\$304	\$0	\$1,100	\$1,700	\$1,700
	Task 1 Subtotal		\$1,440	\$680	\$1,900	\$2,700	\$2,650	\$0	\$0	\$304	\$0	\$1,100	\$10,290	\$10,290
2.A Cleanups														
	Project Management		16										16	\$9,880
	Subcontractor Selection and Coordination		8	8	8	40							64	\$8,380
	Meeting (1)		8	8	8	8							32	\$4,000
	Conduct Day-to-Day Activities		8	8	40	480							536	\$44,980
	Task 2 Subtotal Manhours		40	24	68	528	0	0	0	0	0	0	648	\$58,400
	Subtotal Expenses		\$200	\$200	\$200	\$5,000	\$0	\$0	\$0	\$0	\$222,400	\$7,000	\$236,800	\$236,800
	Task 2 Subtotal		\$7,400	\$3,580	\$5,800	\$47,240	\$0	\$0	\$0	\$0	\$222,400	\$7,000	\$283,480	\$283,480
3.A Survey Monitor Well and Pistometer Locations														
	Project Management		8										8	\$1,440
	Subcontractor Selection and Coordination		4	4	4								12	\$1,880
	Survey		4	4	4	40			40	4			66	\$7,381
	Task 3 Subtotal Manhours		16	8	8	40	0	0	40	4	0	0	118	\$10,511
	Subtotal Expenses					\$300	\$3,700	\$0	\$2,380	\$152	\$6,800	\$1,000	\$10,000	\$10,000
	Task 3 Subtotal		\$2,880	\$1,120	\$800	\$3,700	\$0	\$0	\$2,380	\$152	\$6,800	\$1,000	\$14,811	\$14,811
4.A Review Data and Develop a Workplan for Remedial Installation														
	Project Management		8										8	\$1,440
	Prepares Plan		24	40	40		40		40	40			224	\$29,380
	Task 4 Subtotal Manhours		32	48	48	0	48	0	40	48	0	0	232	\$21,730
	Subtotal Expenses				\$4,000	\$0	\$2,480	\$0	\$2,380	\$1,520	\$0	\$800	\$800	\$800
	Task 4 Subtotal		\$5,780	\$5,800	\$4,000	\$0	\$2,480	\$0	\$2,380	\$1,520	\$0	\$800	\$22,330	\$22,330
5.A Develop a Workplan for a Substitution/Stabilization Feasibility Study														
	Project Management		8										8	\$1,440
	Prepares Plan		24	40	20		40		0	20			152	\$18,832
	Task 5 Subtotal Manhours		32	40	24	0	48	0	0	28	0	0	180	\$17,972
	Subtotal Expenses				\$2,000	\$0	\$2,480	\$0	\$472	\$780	\$0	\$800	\$800	\$800
	Task 5 Subtotal		\$5,780	\$5,800	\$2,000	\$0	\$2,480	\$0	\$472	\$780	\$0	\$800	\$17,972	\$17,972
6.A Develop a Workplan to Evaluate HYDRA Stability														
	Project Management		16										16	\$3,680
	Prepares Plan		24	40	20		40		0	20			152	\$18,832
	Task 6 Subtotal Manhours		40	48	28	0	48	0	0	28	0	0	188	\$18,512
	Subtotal Expenses				\$2,000	\$0	\$2,480	\$0	\$472	\$780	\$0	\$800	\$800	\$800
	Task 6 Subtotal		\$7,200	\$5,800	\$2,000	\$0	\$2,480	\$0	\$472	\$780	\$0	\$800	\$18,512	\$18,512
7.A Blockwater Management														
	Project Management		8										8	\$1,440
	Conduct Day-to-Day Activities					40							40	\$3,200
	Task 7 Subtotal Manhours		8	0	0	48	0	0	0	0	0	0	48	\$4,640
	Subtotal Expenses					\$400	\$0	\$0	\$0	\$0	\$2,640	\$1,400	\$4,440	\$4,440
	Task 7 Subtotal		\$1,440	\$0	\$0	\$3,800	\$0	\$0	\$0	\$0	\$2,640	\$1,400	\$8,680	\$8,680
8.A Grounds Improvement/Makeup Office Portal														
	Project Management				4								4	\$400
	Task 8 Subtotal Manhours		0	0	4	0	0	0	0	0	0	0	4	\$400
	Subtotal Expenses				\$400	\$0	\$0	\$0	\$0	\$0	\$7,700	\$0	\$7,700	\$7,700
	Task 8 Subtotal		\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$7,700	\$0	\$8,100	\$8,100
	Tasks 1, 2, 3, 4, 5, 6, 7, 8, and Subtotal Manhours		176	160	164	638	168	0	88	82	0	0	1488	
	Rate		\$180.00	\$140.00	\$100.00	\$80.00	\$82.00	\$82.00	\$88.00	\$36.00				
	Total Cost		\$31,680	\$21,840	\$16,400	\$51,040	\$9,796	\$0	\$5,984	\$3,496				\$128,916
	Expenses		\$200	\$200	\$200	\$6,200	\$300	\$0	\$0	\$0	\$238,340	\$12,000		\$258,440
	Total Tasks 1, 2, 3, 4, 5, 6, 7, 8, and Expenses		\$31,880	\$22,040	\$16,600	\$57,240	\$10,096	\$0	\$5,984	\$3,496	\$238,340	\$12,000		\$308,346

**ATTACHMENT 1.2
Method of Charging for
Professional Services/Fee
Schedule**

PERSONNEL CLASSIFICATIONS AND MAXIMUM HOURLY RATES

PERSONNEL TITLE	RATE/HOUR
Senior Scientist/Engineer 2	\$180.00
Senior Engineer/Geologist 1	\$140.00
Project Engineer/Geologist	\$100.00
Staff Engineer/Geologist 2	\$80.00
Environmental Scientist 1	\$62.00
Engineering Technician	\$62.00
CADD Operator/Draftsperson	\$59.00
Administrative/Clerical	\$38.00

Note: Additional Personnel Classification, including qualifications, task description and hourly rate, must be approved by MDEQ and must be added to Individual Work Authorizations.



"Escude, David"
<DEscude@arcadis-us.com>
09/20/2006 04:02 PM

To <Trey_Hess@deq.state.ms.us>
cc "Derouen, Craig" <cdrouen@arcadis-us.com>,
<Willie_McKercher@deq.state.ms.us>
bcc
Subject Clearing Contractor Award - Vicksburg Chemical/Mississippi Bluffs

Trey

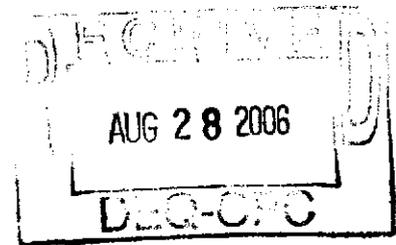
Just to document our activities at the site over the last couple of weeks. We put the clearing contract out for bid a couple of weeks ago to 5 contractors with the stipulation that the work needed to be completed in 30 days. 3 contractors dropped out and the remaining low bid was over our engineering estimate. We decided to rebid the project. We invited 2 new contractors and extended the contract time to a maximum of 60 days. The low bid (~\$200,000) was again over our estimate. A debriefing with the contractors revealed that the reason for the escalated cost was the manpower shortage in the gulf coast region due to the hurricanes. The contractors indicated that the minimum wages for this type of work had escalated substantially over the last year.

Based on this, we are recommending that we award the clearing contract to the lowest bidder. This cost along with the ARCADIS oversight will be presented in our Work Authorization #2 which will be coming out shortly.

Please give me a call if you have any questions.

Thanks

David R. Escude, P.E.
Associate Vice President/Principal Engineer
ARCADIS
10352 Plaza Americana Drive
Baton Rouge, Louisiana 70816
Office 225.292.1004
Direct 225.218.9672 Ext. 245
Fax 225.218.9677



Work Authorization No. 001 (July – August 2006)

The attached ARCADIS G&M, Inc. Proposal for an Initial Project Related Activities, dated July 19, 2006 for the Vicksburg Chemical Company Site in Vicksburg, Mississippi shall be Work Authorization No. 001. This Work Authorization is entered into by and between ARCADIS G&M, Inc., a Delaware corporation ("Consultant") and Mississippi Silvertip Development, LLC ("Client"). This Work Authorization incorporates by reference the PROFESSIONAL SERVICES AGREEMENT entered into by the Parties dated October 25, 2005 (the "Professional Services Agreement").

Finished Work Product/Schedule

Consultant shall do the following:

Task 00PM Project Management/Planning

- Attend 2 Project Kickoff Meetings;
- Meeting 1 was held in Jackson, Mississippi at the MDEQ regional office on March 14, 2006;
- Meeting 2 was held in Vicksburg at the facility on July 11, 2006 to transition the property over to Mississippi Bluffs;
- Perform all planning duties associated with setting up project tasks;
- Coordinate and track budget, invoicing, and other accounting related activities;
- Manage deliverables and schedule; and
- Coordinate with MDEQ.

Task 001 Site Health & Safety Plan (HASP)

- Prepare a site health and safety plan;
- Plan shall be developed to ensure a healthy and safe work environment by providing the means for field personnel, clients, and ARCADIS subcontractors to be aware of the potential hazards at the site and the methods to control exposure; and
- The HASP will include specifics regarding roles and responsibilities, hazard analysis, personal protective equipment, emergency contact information, subcontractor and visitor acknowledgments, preventative measures, material safety data sheets and decontamination procedures (if applicable), tailgate safety briefing information, and hospital routes.

Task 002 Prepare Quality Assurance Project Plan (QAPP)

- Project Plan to include project organization and responsibility;
- Provide for the problem definition and description and state quality objectives and criteria;
- Identify sampling requirements, including field program, sample handling and custody, and analytical program;
- Determine analytical precision, accuracy and data management and documentation;
- Determine the appropriate assessment methodology and response actions; and
- Identify necessary project reports, data validation, and usability requirements.

Task 003 Utility Maintenance

- Coordinate power transfer, security transfer, and other incidentals necessary for continued operation of the site;

- Manage and coordinate day to day activities including scheduling, water treatment, pumping, etc.; and
- Travel to site to inspect leaking tank, coordinate repairs with USES, document activities.

Schedule

- Submit two hard copies of a Site Health and Safety Plan within 7 days of the execution date of this Work Order;
- Submit two hard copies of a Quality Assurance Project Plan (QAPP) for the Initial Baseline Assessment addressing all elements of this work order to be delivered to the Mississippi Department of Environmental Quality ("MDEQ") within 14 days of the execution date of this Work Order;
- Incorporate into the QAPP any comments provided by MDEQ;
- Submit two hard copies of the MDEQ approved Quality Assurance Project Plan (QAPP) and deliver to the MDEQ at least 10 working days prior to implementing an approved site characterization work plan;
- Conduct field activities as outlined in the FINAL MDEQ approved Quality Assurance Project Plan and as identified during data review of from the Site Characterization Report task; and
- Present MDEQ with a scope(s) of work for additional work activities, if necessary.

Compensation for Services:

Client shall pay Consultant for Basic Services on a Time and Materials Basis in accordance with the Fee Schedule for Professional and Environmental Services of the Professional Services Agreement (Attachment 1.2). Attached cost estimate (Table 1A) does not include subcontractor cost or project expenses for not yet determined field activities. Upon determining this cost, a separate work authorization will be provided.

Other costs, such as subcontractor costs, incurred by Consultant pursuant to this Work Authorization shall be reimbursed as follows:

- A. **Subcontracts** - All subcontractor invoices under a Work Authorization shall be accompanied by supporting documentation in detail equivalent to that required of the Consultant. It is acknowledged that some subcontractor services will be based on reimbursement categories and units of measure that differ from those indicated for the Consultant. The appropriate units of measure for the service provided must be documented under a cost reimbursement contract (i.e., Travel reimbursement will be authorized in accordance with the travel requirements of the Consultant listed in B. below. Drilling subcontracts may be based on a per foot or per well cost. Laboratory subcontracts will be based on a per sample cost. Expense items needed which are not included in the per unit price must be supported by appropriate receipts equivalent to that required of the Consultant). In the event a fixed price is negotiated with a subcontractor, an invoice supported by documentation of the work performed will be sufficient. Equipment Vendor or Subcontractor invoices are subject to no more than a 10% markup of actual invoice or actual cost by Consultant.
- B. **Travel** - Travel expenses and per diem must be documented with appropriate receipts and in accordance with the Federal Per Diem Schedule.
- C. **Laboratory Analyses** - Maximum analytical turnaround time shall be three (3) weeks. The cost for performing sample analysis, laboratory blanks, duplicates, spikes, and standards shall be charged in accordance with an executed work authorization.
- D. **Purchase of Equipment/Non-Expendable Supplies** - Reimbursement for the purchase of equipment/non-expendable supplies is subject to specific approval by the Client and MDEQ. Such

determine a mutually acceptable means of use, ownership, and/or disposal of the equipment/non-expendable supplies.

- E. Charges for services or expenses, including services and expenses of subcontractors, directly identifiable to a work authorization which are not included in the payment schedules herein, shall be compensated at rates mutually acceptable to the Client, MDEQ, and the Consultant, and shall be evidenced by an executed work authorization.

Consultant's estimate of the amount that will become payable for Basic Services under this Work Authorization is **\$83,468** and is itemized in the attached ARCADIS G&M, Inc. Cost Estimate. This amount is only an estimate for planning purposes, is not binding on the Parties, and is not the maximum amount payable to Consultant. However, the maximum amount payable to Consultant will not exceed 115% of the Consultant's estimate under this Work Authorization without a modification of this Work Authorization and approval of Client and MDEQ. Consultant must keep track of costs throughout the period of performance of this work authorization and must notify Client and MDEQ immediately upon discovery that the work is projected to exceed the maximum amount payable under this work authorization. Changes in the Work shall be conducted in accordance with Section 4 of the Professional Services Agreement and will require a modification of a Work Authorization with approval of Client and MDEQ.

Consultant's Fee Schedule (Attachment 1.2) is attached.

Consultant's Cost Estimate (Table 1A) is attached.

Mississippi Bluffs Industrial Park, LLC

By: _____

Title: _____

Date: _____

Mississippi Department of Environmental Quality

By: _____

Title: _____

Date: _____

ARCADIS G&M, Inc.

By: _____

Title: _____

Date: _____

TABLE 2A

**Vicksburg Chemical Company
Corrective Action Cost Estimate Authorization 001 (07/25/06)**

Task	Manhours	Cost	Expenses	Total	
ARCADIS	1	106	\$17,268	\$2,000	\$19,268
	2	42	\$3,880	\$500	\$4,380
	3	296	\$24,520	\$500	\$25,020
	4	80	\$12,800	\$22,000	\$34,800
ARCADIS Total		524	\$58,468	\$25,000	\$83,468

Vicksburg Chemical Company
Corrective Action Cost Estimate
Baton Rouge, Louisiana

Category Personnel:	Senior Engineer 2	Senior Engineer 1	Project Engineer	Staff Engineer 2	Env. Scientist 1	Egr. Technician	CADD Operator	Admin/Clerical	Subcontractor Exp	Expenses	Total	Total
Task Description												
PM Project Management/Planning												
March 14, 2006 - 1 Day	16							2			16	\$2,958
July 11, 2006 - 2 Days	32							2			34	\$5,638
Project Management/Planning	32	16	4					2			54	\$8,476
Task 1 Subtotal Manhours	80	16	4	0	0	0	0	6	0	0	106	\$17,280
Subtotal Expenses	\$750	\$750								\$500		\$2,000
Task 1 Subtotal	\$15,150	\$2,980	\$400	\$0	\$0	\$0	\$0	\$228	\$0	\$500		\$19,258
1.0 Site Health & Safety Plan												
Prepare Plan	2		16	24							42	\$3,880
Task 2 Subtotal Manhours	2	0	16	24	0	0	0	0	0	0	42	\$3,880
Subtotal Expenses										\$500		\$500
Task 2 Subtotal	\$360	\$0	\$1,600	\$1,920	\$0	\$0	\$0	\$0	\$0	\$500		\$4,380
1.0 Prepare QAPP												
Prepare Plan	16	40	40	40	80		40	40			296	\$24,520
Task 3 Subtotal Manhours	16	40	40	40	80	0	40	40	0	0	296	\$24,520
Subtotal Expenses										\$500		\$500
Task 3 Subtotal	\$2,880	\$5,600	\$4,000	\$3,200	\$4,960	\$0	\$2,360	\$1,520	\$0	\$500		\$25,020
1.0 Utility Maintenance												
Coordinate Day to Day Activities	40	40									80	\$12,800
Site Visit/Coordinate USES Repair of Tail Oil Tank	4	4		16								
Task 4 Subtotal Manhours	40	40	0	0	0	0	0	0	0	0	80	\$12,800
Subtotal Expenses									\$22,000			\$22,000
Task 4 Subtotal	\$7,200	\$5,600	\$0	\$0	\$0	\$0	\$0	\$0	\$22,000	\$0		\$34,800
Tasks 1, 2, and 3 Subtotal Manhours	138	96	60	64	80	0	40	46	0	0	524	
Rates	\$180.00	\$140.00	\$100.00	\$80.00	\$62.00	\$82.00	\$59.00	\$38.00				
Total Cost	\$24,840	\$13,440	\$6,000	\$5,120	\$4,980	\$0	\$2,380	\$1,748	\$0	\$0		\$58,468
Expenses	\$750	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$22,000	\$1,500	\$0	\$25,000
Total Tasks PM, 1, 2, 3, and expenses	\$25,590	\$14,190	\$6,000	\$5,120	\$4,980	\$0	\$2,380	\$1,748	\$22,000	\$1,500		\$63,468



"Escude, David"
<DEscude@arcadis-us.com>
09/20/2006 04:02 PM

To <Trey_Hess@deq.state.ms.us>
cc "Derouen, Craig" <cderouen@arcadis-us.com>,
<Willie_McKercher@deq.state.ms.us>
bcc
Subject Clearing Contractor Award - Vicksburg Chemical/Mississippi Bluffs

Trey

Just to document our activities at the site over the last couple of weeks. We put the clearing contract out for bid a couple of weeks ago to 5 contractors with the stipulation that the work needed to be completed in 30 days. 3 contractors dropped out and the remaining low bid was over our engineering estimate. We decided to rebid the project. We invited 2 new contractors and extended the contract time to a maximum of 60 days. The low bid (~\$200,000) was again over our estimate. A debriefing with the contractors revealed that the reason for the escalated cost was the manpower shortage in the gulf coast region due to the hurricanes. The contractors indicated that the minimum wages for this type of work had escalated substantially over the last year.

Based on this, we are recommending that we award the clearing contract to the lowest bidder. This cost along with the ARCADIS oversight will be presented in our Work Authorization #2 which will be coming out shortly.

Please give me a call if you have any questions.

Thanks

David R. Escude', P.E .
Associate Vice President/Principal Engineer
ARCADIS
10352 Plaza Americana Drive
Baton Rouge, Louisiana 70816
Office 225.292.1004
Direct 225.218.9672 Ext. 245
Fax 225.218.9677



MACTEC, Inc.
 MACTEC Engineering and Consulting
 MACTEC Development

Urgent, please hand deliver

For Review / Comment

Please Reply

TO:	Mr. Trey Hess	DATE:	September 9, 2005
FIRM:	MS Dept of Environmental Quality	SUBJECT:	Schedule of Fees
FAX:	601.961.5300	COMMENTS: The information you requested.	
TEL:	601.961.5654		
* PAGES:	3 + this cover sheet		
COPY TO:			
FROM:	Jay Ferris		
OFF/DEPT:	Office Manager/Senior Geologist		
FAX:	601.936.6090		
TEL:	601.936.6633		
PROJECT #:			
HARDCOPY:			
ADDRESS:	628 Lakeland East Drive		
	Suite D		
	Flowood, MS 39232		

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MACTEC Engineering and Consulting
2005 Schedule of Fees
 for
Environmental Engineering / Design / EIS / Remediation Services
(Standard E - except New York and California)

Effective: September 15, 2004

I. Personnel

Charges will be made at the following rates for time spent in project management, consultation or meetings related to the project, conducting field inspections, sampling, evaluations, review and analysis of field and laboratory data, report preparation and review, design, travel time, etc.

Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the standard rate times 2.0. Technician and Support Personnel time for work over 8 hours per day and on holidays, Saturday and Sunday will be charged at the standard rate times 1.5.

A. Professional (Engineer, Geologist, Scientist and Project Management)

Staff	\$88.00/hour
Project	\$96.50/hour
Senior	\$134.00/hour
Principal/Project Manager	\$172.00/hour
Senior Principal/Senior Project Manager	\$193.50/hour
Chief Engineer/Scientist	\$225.50/hour
Special Rate Personnel*	Separate Schedule

* Special Rate Personnel identified by name (such as certain Senior Principals with specialized expertise) will be billed at a special rate identified for individual projects.

B. Technical Services (Engineering and Science)

Technician	\$64.50/hour
Senior Technician	\$88.00/hour
Principal Technicians and Specialty Technicians (i.e., persons holding specialized certifications)	Separate Schedule
Project Administrator/Project Coordinator/Subcontract Administrator	\$83.50/hour
Technical Writer/Document Processor (includes PC/CAD)	\$79.50/hour
CADD/Draftsperson (includes PC/CAD)	\$88.00/hour
Clerical	\$62.00/hour

2005 Schedule of Fees
Standard E

C. Contract Labor

From time to time, MACTEC retains outside Professional and Technical labor on a temporary basis to meet peak workload demands. Such contract labor will be charged at regular Schedule of Charges rates.

II. Expenses

A. Travel Expenses

1. Transportation
 - a. Company pickup/personal vehicle, per mile - \$0.45
 - b. Common carrier or car rental multiplied by 1.15
2. Per Diem expenses: direct expenses multiplied by 1.15

B. Disposal of Hazardous Waste Samples

Samples of waste will be disposed by permitted methods after a determination is made that the waste is defined by RCRA to be hazardous. Due to the requirements for some hazardous assessments, disposal and invoicing of incurred expenses may take place after invoicing of the originally contracted work.

C. Equipment / Other Expenses

Truck and Field Test Equipment	\$18.00/hour
Digital Field Documentation Equipment (cameras, water level & measuring tapes, GPS units, etc.)	Separate Schedule
Geophysical Equipment	Separate Schedule
Geotechnical & Environmental Monitoring & Sampling Equipment	Separate Schedule
Special equipment or supplies, permits, shipping charges, special printing or other items not customarily provided by MACTEC will be charged at cost multiplied by 1.15	

D. Communications

In-house costs for long-distance phone, telex, telecopier, postage - project labor charges x 5%.

III. Subcontracts

Subcontract services will be invoiced at cost multiplied by 1.15.