

MWC Legal & Environmental Consulting
7413 Lake Windermere Dr.
Corpus Christi, Texas 78413
Fax: 361-850-9604

August 31, 2004

Ms. Susan Widener
Sparton Corporation
2400 East Ganson Street
Jackson, Michigan 49202

Re: Sparton Technologies, Inc.
Albuquerque, New Mexico
Coors Road Facility Financial Assurance Estimate

Dear Ms. Widener:

MWC Legal & Environmental Consulting is pleased to provide the attached estimate of financial assurance to be included in the submission by Sparton Technologies, Inc. (Sparton) to the Environmental Protection Agency (EPA) and New Mexico Environmental Department (NMED) per Section XXIV, Paragraph 90, of the March 3, 2000 Consent Decree and meets the requirements for cost estimates for closure found under 40 CFR §264.142. The attached estimate of \$4,030,350 is based on an effective value date on June 30, 2004, which is consistent with Sparton's fiscal year-end and also the RCRA regulatory requirements. This estimate is \$130,980 higher than the previous estimate provided to Sparton on August 25, 2003. The largest single item reducing the estimate is completion of another year, for a total of 5 of the 30 years of projected time for closure operations. The estimated contribution for the most recently completed fiscal year was \$183,595 not including the MW-71R treatment system. The largest adjustment was increasing labor rates per the May 2004 NMED Corrective Action Fund contractor fee schedule which amounted to an overall increase in labor costs over the 25 remaining years of approximately \$323,000. In addition, electricity costs decreased based on FY2004 actual costs. Installation of a treatment system for MW-71R and operation for one year was moved from FY2004 to FY2005/2006. The modifications made as part of the update of the financial assurance estimate, are described both below and in the attached estimate as notes of the changes made. (See Attachment 1 – 25 Year Summary.)

The starting point for this update was the estimate provided to Sparton on August 25, 2003 with adjustments made to reflect an estimated effective value as of the end of FY2004, June 30, 2004, covering the project through the estimated life of 25 years. Mr. Tony Hurst was again contacted as part of this update and he provided information, including monthly reports, on operations of the systems at the Coors Road Facility. The estimate for plugging and abandoning site wells was also confirmed. The update process and changes made to the estimate included the following:

- Labor rates are based upon NMED Corrective Action Fund contractor fee schedules for the maximum hourly rates for professional services. The fee schedule was updated in May 2004 and the new rates were used for the financial assurance estimate. These new labor rates increased the total labor cost estimate for the 25 remaining years of the project by approximately \$323,000.
- Sampling equipment costs are also based upon NMED Corrective Action Fund contractor fee schedules. The fee schedule was updated in May 2004 and the new equipment costs were used for the financial assurance estimate. These new equipment costs increased the total sampling equipment cost estimate for the 25 remaining years of the project by approximately \$14,000.
- The additional capital expenditures in the financial assurance estimate for a MW-71R effluent sand and carbon filter treatment system were shifted from FY2004 to FY2005 and the estimate updated using the new labor rates. The FY2005 estimate is \$129,500 versus \$128,00 in FY2004.
- The one year of operations of the MW-71R treatment system was shifted from a start in the 4th Quarter of FY2004 to a start in the 3rd Quarter of FY2005. Included was power based on FY2004 actual electricity costs, estimated O&M Equipment costs, and Labor costs using updated rates.
- The average cost of electricity incurred during FY2004 was used to estimate future expenditures. The change decreased total electricity costs for the remaining 25 years of the project by approximately \$42,000
- The actual cost for the lease of water rights listed under source containment was included

Based on the information obtained, original assumptions are still valid with respect to the end date (FY2029), expected operations and maintenance of various systems (exceptions noted above), closure (including well plugging and abandonment costs), analysis costs, and other costs associated with evaluation and recommendations.

It has been my pleasure assisting Sparton Corporation with this matter. If you should have questions, please feel free to contact me at 361-850-9604 or 361-947-9003.



Mark W. Cheesman, J.D.
Principal

cc: Mr. Tony Hurst – Hurst Engineering Services

25-Year Summary
Attachment 1

August 31, 2004
Sparton Technologies, Inc.

MWC Legal & Environmental Consulting
7413 Lake Windermere Drive
Corpus Christi, Texas 78413
(361) 850-9604

Sparton Technologies, Inc.
Coors Rd. Facility
Albuquerque, New Mexico
Fiscal Year 2005
25 Year Summary

		Material and Service Expenditures (8)				Labor Expenditures (8)				TOTAL TYPICAL ANNUAL COST	2005-2009	2010-2014	2015-2019	2020-2024	2025-2029	Totals	
Changes Notes		Unit	No.	Cost/Unit	Contingency	Percent	Hours	Hourly Rate	Contingency	Percent							
Remaining Capital Expenditures																	
Offsite Containment I No remaining tasks																	
Vadose (SVE) No remaining tasks																	
Source Containment No remaining tasks																	
4	MW-71R Treatment System Sand & Carbon Filter Treatment with Re-injection		1	101,000	11000	11%	240	66.00	1660.00	10%		\$129,500	\$0	\$0	\$0	\$0	\$129,500
Total Remaining Capital Expenditure																	
O&M Expenditures																	
Offsite Containment II Permits / Licenses																	
Pipeline Easement		LS	1	500		0%					500	2500	2500	2500	0	0	
Arroyos Easement		LS	1	3,000		0%					3000	15000	15000	15000	0	0	
1	Operate System - Power (45hp) & Utilities	Month	12	1,888	2744	12%					25400	127000	127000	127000	0	0	
Influent/Effluent Sampling		Month	12	315	420	11%					4200	21000	21000	21000	0	0	
O&M - Equipment (a)		Month	12	1,140	1320	10%					15000	75000	75000	75000	0	0	
O&M - Labor (b) Ground water monitoring -see below O&M - Chromium Treatment, Complete							156	63.25	1033.00	10%	10900	54500	54500	54500	0	0	
Vadose (SVE) Monitoring - Soil gas samples, Complete												\$0	\$0	\$0	\$0	\$0	\$0
Source Containment												\$169,800	\$169,800	\$169,800	169,800	169,800	\$848,000
2	Operate System - Power	Month	12	707	1016	12%					9500	47500	47500	47500	47500	47500	
Influent/Effluent Sampling		Month	12	315	420	11%					4200	21000	21000	21000	21000	21000	
O&M - Equipment (a)		Month	12	890	1120	10%					11800	59000	59000	59000	59000	59000	
O&M - Labor (b)							117	63.25	799.75	11%	8200	41000	41000	41000	41000	41000	
3	Lease of water rights	LS	1	220		0%					220	1100	1100	1100	1100	1100	
5	MW-71R Treatment System											\$19,900	\$0	\$0	\$0	\$0	\$29,850
Operate System - Power (r)		Month	12	335	480	12%					4500	4500	0	0	0	0	
O&M - Equipment (r)		Month	12	900	1100	10%					11900	11900	0	0	0	0	
O&M - Labor (r)							50	63.25	337.50	11%	3500	3500	0	0	0	0	
Evaluation, Analysis & Recommendation												\$312,900	\$279,500	\$279,500	\$279,500	\$279,500	\$1,430,900
Quality Check (c)							5	66.00	70.00	21%	400	2000	2000	2000	2000	2000	
Aquifer Model (Estimate) (d)							100	82.50	1650.00	20%	8900	24000	7000	7000	7000	7000	
Annual Reports Incl. Perf. & Alt. Eval. (e)							50	66.00	700.00	21%	4000	20000	20000	20000	20000	20000	
Ground Water Monitoring and Sampling Data Collection and Sampling (f)							255	63.25	1671.25	10%	17800	89000	89000	89000	89000	89000	
7	Sampling Equipment (g)	Sample	93	19.50	186.5	10%					2000	10000	10000	10000	10000	10000	
Analysis (Lab Costs) (h)		Sample	93	270	2790	11%					27900	139500	139500	139500	139500	139500	
QA/QC and Data Analysis (i)							26	82.50	255.00	12%	2400	12000	12000	12000	12000	12000	
Analysis of Additional Modeling Information (j)							180	82.50	1550.00	10%	16400	16400	0	0	0	0	
Closure												\$0	\$0	\$0	\$0	\$103,300	\$103,300
Plug and Abandon 83 wells		Well	83	1,300	12300	15%					94200	0	0	0	0	94200	
Remove Piping (LS)				1,650	550	33%					2,200	0	0	0	0	2200	
Closure Certification Report (k)							60	104.50	630.00	10%	6900	0	0	0	0	6900	
Soil Sampling at Infiltration Galleries (l)																	
Project Management											\$ 24,550	\$122,750	\$122,750	\$122,750	\$122,750	\$122,750	\$613,750
Management (m)							170	82.50	1375.00	10%	15400	77000	77000	77000	77000	77000	
Data Tabulation (n)							25	82.50	237.50	12%	2300	11500	11500	11500	11500	11500	
Monthly Reporting (o)							25	82.50	237.50	12%	2300	11500	11500	11500	11500	11500	
Annual Reporting (p)							50	82.50	425.00	10%	4550	22750	22750	22750	22750	22750	
Total O&M Expenditure																	
Summary																	
Total Remaining Capital Expenditure																	
Total O&M Expenditure																	
TOTAL																	
											\$129,500	\$0	\$0	\$0	\$0	\$129,500	
											\$920,150	\$866,850	\$866,850	\$571,850	\$675,150	\$3,900,850	
											\$1,049,650	\$866,850	\$866,850	\$571,850	\$675,150	\$4,030,350 (q)	

Changes made:

1. Offsite Containment O&M Expenditures for Operate System - Power (45hp) & Utilities has decreased from \$1,975/Unit to \$1,888/Unit and contingency increased from \$2,602 to \$2,744.
This was based on using the average monthly actual electricity cost in FY2004 adjusted for operating 100% of the time.
2. O&M Expenditures to Operate System - Power (12hp) has decreased from \$787/Unit to \$707/Unit and contingency from \$1,061 to \$1,016 based on average FY2004 monthly actual electricity costs.
3. Cost/Unit of Source Containment Lease of water rights was decreased to \$220 (based on actual costs).
4. MW-71R Treatment System estimated capital cost for 40 gpm sand filter and carbon treatment system, new electrical feed, injection pump and injection well plus engineering for project.
No money is included for permitting. Expenditure moved to FY2005.
5. MW-71R Treatment system operating cost is electricity (using FY2004 electricity costs) to operate carbon treatment system and 5 hp motor for pump to re-inject treated groundwater.
O&M Costs, labor estimated at 1 hour per week for a field technician while equipment is a sand filter and carbon filter. Expenditure shifted to start 3rd Quarter FY2005.
6. Updated labor rates per May 2004 NMED Corrective Action Fund contractor fee schedules for the maximum hourly rates for professional services.
7. Updated material rates per May 2004 NMED Corrective Action Fund contractor fee schedules for field equipment.

Notes

- (a) The equipment cost of \$15,000 per year each for offsite systems and \$11,800 per year for the onsite system includes \$200,000 for replacing a total of 14 wells.
- (b) Labor cost for operation and maintenance of the containment systems (off-site and source) assumes \$63.25/hour plus a minimum contingency of 10%. The labor requirement assumes performing routine inspection on each of the two systems an average of 3 hours per week for the offsite and 2.25 hours per week for the onsite, not including 15 minute inspections each week included in sampling labor. This is consistent with experience and the experience of Sparton. The inspection and monitoring program will entail checking and recording information related to the status of the system. The parameters that will be monitored are listed in Appendix K of the System O&M Manual.
- (c) Quality Check entails additional evaluation of previously collected analytical data, resulting in 5 hours of work annually for a staff scientist (\$66.00 / hour) plus a minimum of 10% contingency.
- (d) Aquifer Modeling will require 100 hours per year through 2006 and 14 hours per year for the remaining years. Basis for the reduction of effort relates to the improved calibration of the model over time, assuming only minor adjustments will be required to confirm model outputs are consistent with observations. Modeling will be executed by a Project Scientist (\$82.50 / hour) plus a minimum of 10% contingency.
- (e) The preparation of annual reports includes performance and alternative system evaluation. Due to the data generated throughout the process, with costs contained in other sections of the budget (i.e. modeling, data analysis, etc.), 50 hours annually are allocated to prepare the Annual Report for a Staff Engineer (\$66.00 / hour). A minimum of 10% contingency and additional review by a Senior Engineer are included in a total contingency not to exceed \$700.00.
- (f) Data collection and sampling for the 63 wells located both on- and off-site require 255 hours annually for a field technician (\$63.25), plus a minimum of 10% contingency.
- (g) Assumes 19 days for rental of pH/specific conductance/temperature meter (\$50/day), water level indicator (\$25/day), disposable bailers (\$3/day), miscellaneous equipment (gloves, tape, replacement drums, etc., \$5/well), which averages about \$19.50/sample.
- (h) Number of samples based on 63 wells plus approximately 30 quality control samples.
- (i) Quality Assurance and Control of data analysis results consists of 1 hour every other week for a Project Engineer (\$82.50 / hour) plus a minimum of 10% contingency.
- (j) Analysis of Modeling Information will entail combining previous annual reports, modeling results and other previously collected data with the 5 year annual report; interactions with NMED & EPA; the data analysis and performance evaluation for this report is included under aquifer modeling, annual reports and project management.
- (k) Closure Certification Report entails compiling historical data and a written analysis of 30 years of progress, as a result of the remedial actions, by a Senior Engineer (\$104.50/ hour) plus a minimum of 10% contingency.
- (l) Task to be completed only if significant exceedances of discharge limits occur, thus no expenditure is anticipated. If this expenditure is required, the contingency for closure (\$12,850) is ample to cover the anticipated sampling cost (\$1000).
- (m) "Management" consists of meetings with agency representatives, consultants and individuals from Sparton Technologies, in addition to handling routine administrative tasks. The total estimate for these tasks is 170 hours per year.
- (n) "Data Tabulation" is assumed to be on a quarterly basis for about 6 hours per quarter.
- (o) "Monthly Reporting" is assumed to be about 2 hours per month.
- (p) "Annual Reporting" is assumed to be 50 hours annually.
- (q) Total includes contingency.
- (r) Current projection is to complete installation of MW-71R treatment system by end of 2nd Quarter FY2005 and operate for 1 year. O&M Equipment costs include sand filter rental and carbon filter system. O&M labor is for \$63.25/hr for a field technician, one hour per week plus a minimum 10% contingency. Power is for 40 gpm re-injection pump.

Review of Financial Assurance Test

(financial numbers as of 6/30/04)

Criteria

Met Criteria?

*

Liabilities to Net worth less than 2

Liabilities	Net Worth			
\$25,553,397	to \$88,866,099	equals	0.29	Yes

*

Current Assets to Current Liabilities greater than 1.5

Curr. Asset	Curr. Liability			
\$91,358,693	to \$19,011,388	equals	4.81	Yes

Working Capital and Net worth greater than 6 time remediation liability (6 x \$4,030,350 = \$24,182,100)

Curr. Asset	Curr. Liability	Working Capital	
\$91,358,693	less \$19,011,388	equals \$72,347,305	Yes

Net Worth	
\$88,866,099	Yes

Net Worth greater than \$10,000,000 Yes

U.S. Assets greater than 90% of total assets or greater than 6 time remediation liability (\$24,182,100)

Total Assets	Canada	U.S. %	
\$114,419,496	\$8,955,786	92.2%	Yes

U.S. Assets	
\$105,463,710	Yes

*

Net Income plus depreciation plus depletion plus amortization / Total Liabilities greater than 0.1

Net income (loss)	(\$2,043,497)		
Depreciation	\$1,597,582		
Depletion		Total	
Amortization		Liabilities	
Total	<u>(\$445,915)</u>	<u>\$25,553,397</u>	(0.017) No

*

Only two of the three criteria must be met - Are two met? Yes