

ST 2003

**MWC Legal & Environmental Consulting**  
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August 25, 2003

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 \$3,899,370 is based on an effective value date on June 30, 2003, which is consistent with Sparton's fiscal year-end and also the RCRA regulatory requirements. This estimate is \$76,840 higher than the previous estimate provided to Sparton in August 2002. The item reducing the estimate is completion of another year, for a total of 4 of the 30 years of projected time for closure operations. The estimated contribution for the most recently completed fiscal year was \$196,850. Other major adjustments include increasing electricity costs based on FY2003 actual costs, increasing the average cost to replace 14 monitoring/recovery wells from \$10,000 to \$15,000 per well, and installing and operating for 1 year a treatment system for MW-71R. 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 – 26 Year Summary.)

The starting point for this update was the estimate provided to Sparton in August 2002 with adjustments made to reflect an estimated effective value as of the end of FY2003, June 30, 2003 covering the project through the estimated life of 26 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. Labor rates and the estimate for plugging and abandoning site wells were also confirmed. The update process and changes made to the estimate included the following:

- Included \$128,000 for additional capital expenditures in the financial assurance estimate for a MW-71R effluent sand and carbon filter treatment system. Treated effluent is to be re-injected into the source strata.
- Provided for one year of operations of the MW-71R treatment system starting in the 4<sup>th</sup> Quarter of FY2004. Included power for the system, and estimated O&M Equipment and Labor costs.
- Used for future estimated expenditures the average cost of electricity incurred during FY2003.
- Previously estimated O&M Equipment costs included replacement of monitoring and recovery wells. The FY2003 estimate was for \$140,000 to replace 15 wells. MW-52 was replaced in FY2003, thus the number of wells to be replaced was reduced to 14 for the balance of the operations. In addition, the average estimated cost to replace these wells was increased based on current costs.
- Included actual cost for the lease of water rights listed under source containment.
- Increased labor rate for producing the closure certification report to reflect using a Senior Engineer.

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), labor rates, 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

**26-Year Summary**  
*Attachment 1*

*August 25, 2003*  
*Sparton Technologies, Inc.*

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**Changes made:**

1. Offsite Containment O&M Expenditures for Operate System - Power (45hp) & Utilities has increased from \$1,875/Unit to \$1,975/Unit and contingency from \$2,250 to \$2602  
This was based on using the average monthly actual electricity cost in FY2003 adjusted for operating 100% of the time.
2. O&M Expenditures to Operate System - Power (12hp) has increased from \$747/Unit to \$787/Unit and contingency from \$895 to \$1061 based on average FY2003 monthly actual electricity costs.
3. O&M Equipment for the Source Containment and Offsite Containment were increased to account for a higher estimated cost to replace 14 monitoring/recovery wells over the balance of the project.
4. Cost/Unit of Source Containment Lease of water rights was increased to \$335 (based on actual costs).
5. Cost/Unit to Plug and Abandon 63 wells was verified.
6. The Hourly Rates for Labor Expenditures for Closure Certification Report was increased due to requirement for professional certification of the report.
7. 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.
8. MW-71R Treatment system operating cost is electricity 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.
9. The Hourly Rates for Labor Expenditures were checked for applicability.
10. The cost estimates for the 2000-2004 column has been modified to show FY 2004 (i.e. 1 year) while the remaining columns are for 5 year periods.

**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 \$45.00/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 (\$60.00 / hour) plus a minimum of 10% contingency.
- (d) Aquifer Modeling will require 520 hours for the first three years, 100 hours for the next four years, 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 (\$75.00 / 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 (\$60.00 / hour). A minimum of 10% contingency and additional review by a Senior Engineer are included in a total contingency not to exceed \$600.00.
- (f) Data collection and sampling for the 63 wells located both on- and off-site require 255 hours annually for a field technician (\$45.00), plus a minimum of 10% contingency.
- (g) Assumes 19 days for rental of pH/specific conductance/temperature meter (\$20/day), water level indicator (\$25/day), disposable bailers (\$2/day), miscellaneous equipment (gloves, tape, replacement drums, etc., \$5/well), which averages about \$14/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 (\$75.00 / hour) plus a minimum of 10% contingency.
- (j) Analysis of Additional Modeling Information will entail combining previous annual reports, modeling results and other previously collected data with the current (5th year) annual report; 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 (\$95.00 / 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 (\$11,500) 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 3rd Quarter FY2004 and operate for 1 year. O&M Equipment costs include sand filter rental and carbon filter system. O&M labor is for \$45.00/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 6/30/03)

<b>Criteria</b>	<b>Met Criteria?</b>
<b>* Liabilities to Net worth less than 2</b>	
Liabilities \$24,845,664 to	Net Worth \$91,168,206 equals 0.27
	Yes
<b>* Current Assets to Current Liabilities greater than 1.5</b>	
Curr. Asset \$95,997,615 to	Curr. Liability \$18,015,533 equals 5.33
	Yes
<b>Working Capital and Net worth greater than 6 time remediation liability (6 x \$3,899,370 = \$23,396,220)</b>	
Curr. Asset \$95,997,615 less	Curr. Liability \$18,015,533 equals
	Working Capital \$77,982,082
	Yes
	Net Worth \$91,168,206
	Yes
<b>Net Worth greater than \$10,000,000</b>	Yes
<b>U.S. Assets greater than 90% of total assets or greater than 6 time remediation liability (\$23,396,220)</b>	
Total Assets \$116,013,870	Canada \$6,702,922
	U.S. % 94.2%
	Yes
U.S. Assets \$109,310,948	
	Yes
<b>* Net Income plus depreciation plus depletion plus amortization / Total Liabilities greater than 0.1</b>	
Net income (loss) Depreciation Depletion Amortization Total	\$8,992,272 \$1,497,083   <hr/> \$10,489,355 /
	Total Liabilities <hr/> 24,845,664
	0.422
	Yes
<b>* Only two of the three criteria must be met - Are two met?</b>	Yes