

ST 2003

HURST ENGINEERING SERVICES  
17990 Clydesdale Road\* Colorado Springs, CO 80908  
Email: tonyhurst@earthlink.net

Friday, December 05, 2003

Mr. Charles A. Barnes, Project Manager  
Compliance Assurance & Enforcement Div.  
U.S. Environmental Protection Agency  
Region 6  
1445 Ross Avenue, Suite 1200  
Dallas TX 75202-2733

Mr. John Kieling, Project Coordinator  
New Mexico Environment Department  
P. O. Box 26110  
Santa Fe, NM 87502-6110

Dear Messrs. Barnes and Kieling:

Re: Response to EPA/NMED 2002 Annual Report Comments.  
Sparton Technology, Inc., Consent Decree  
Civil Action No. CIV 97 0206 LH/JHG

Sparton Technology, Inc has received your 2002 Annual report comments letter of November 7<sup>th</sup>, 2002, and wishes to provide the following response to the EPA/NMED comments.

**Comment:**

1. **Reference to the Soil Vapor Extraction System can be deleted in future monthly reports.**

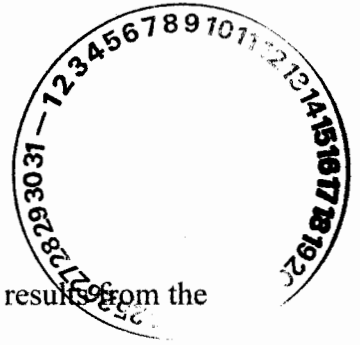
Response: Future monthly reports will not reference the Soil Vapor Extraction System.

**Comments:**

2. **A sampling plan for MW-71R is needed. The assumption is that the sample plan for MW-71 will be used, but a statement to that effect is needed.**
3. **A work plan is needed for MW-71R detailing how the well will be managed.**
4. **A list of proposed activities is needed enumerating the options planned following a year of "pump and treat".**

Response: A Work Plan that includes an implementation schedule for constructing and operating MW-71R will be submitted to EPA/NMED by December 31<sup>st</sup>, 2003. This Work Plan will also include a sampling plan for the well (similar to that for well MW-71)

Phone Fax: (719) 599-7960 ♦ Cell: (719) 649 (944



Friday, December 05, 2003

and a list of the actions to be taken by Sparton in response to potential results from the pump-and-treat operation of the well.

**Comment:**

5. **A plan/data detailing and/or supporting closure and release of 4 ponds at the Source Containment facility to Melloy Dodge is needed.**

Response: The performance of the six rapid infiltration ponds associated with containment well CW-1 (State Engineer Office file number RG-73531-T) was evaluated following the first full year of operation. The attached consumptive use calculations (which were prepared for the New Mexico State Engineer Office) show that a maximum of 25% of two pond bottoms were wetted at any time during 2002. This means that 0.5 ponds (25% x 2) is all that is needed to infiltrate the 50 gpm which is being produced.

Sparton has indicated that it may wish to convert part of the pond area to other uses while retaining the legal right to recover all the pond area should it be needed for infiltration in the future. If Sparton converts the four eastern ponds to other uses, the remaining two western ponds will provide 4 times as much pond area as is presently being used. This safety factor of 4:1 should be adequate to allow for pond bottom clogging and cleaning while maintaining operation of the system at 50 gpm.

If you have any questions, please feel free to give me a call (719-599-7960).

Sincerely,  
HURST ENGINEERING SERVICES

A handwritten signature in black ink, appearing to read "Tony Hurst".

Tony Hurst  
Project Coordinator  
Sparton Technology, Inc.

Cc: Secretary, Sparton Technology, Inc.,  
Mr. James B. Harris  
Mr. Gary L. Richardson  
Mr. Stavros S. Papadopoulos  
By Fax: Mr. Charles A. Barnes, 214-665-7264  
✓ Mr. John Kieling, 505-428-2567  
By Email.

**CONSUMPTIVE USE CALCULATIONS  
FILE RG-73531-T  
2002**

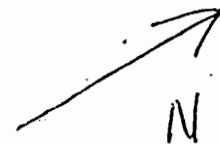
Diversion during 2002= ..... 78.3 AF  
 Total Rapid Infiltration Pond Area= ..... 2.2 Ac  
 Number of Pond Cells= ..... 6  
 Average Cell Area= ..... 0.37 Ac/cell  
 Maximum No. Cell in use at any time= ..... 2  
 Maximum Portion of any cell bottom wetted  
 (See attached Water Surface Pattern Records)= ..... 25%  
 Maximum Wetted Area= ..... 2 cells x  $\frac{0.37 \text{ Ac}}{\text{cell}}$  x 25% = 0.19 Ac  
 Average Annual Evaporation Rate=73.18 in/yr <sup>(1)</sup> = ..... 6.09 ft/yr  
 According to Linsley, 1958  
     Lake Evaporation= ..... 0.70  
     Pan Evaporation  
 Lake Evaporation at Sparton Site =6.09  $\frac{\text{ft}}{\text{yr}}$  x 0.70= ..... 4.27 ft/yr  
 Consumptive use during 2002 =0.19 Ac x 4.27  $\frac{\text{ft}}{\text{yr}}$ = ..... 0.81 AFY  
 Consumptive use as percentage of diversion =  $\frac{0.81 \text{ AF}}{78.3 \text{ AF}}$ = ..... 1.04%



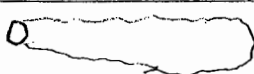

<sup>(1)</sup> Based on Pan Evaporation from 1962 to 1996 at Los Lunas, New Mexico Experiment Station. (See TABLE 1).

# SPARTON ELECTRONICS

Rapid Infiltration Ponds  
Surface Water Pattern






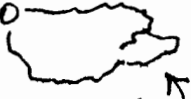
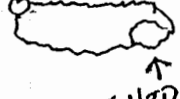
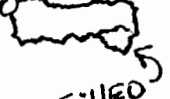
APRIL 2002



Week 1 Date		Week 2 Date		Week 3 Date		Week 4 Date	
0 X Cell 1	Cell 2	X		X		1 X	2 
0 X Cell 4	Cell 3	X		X		4 X	3 
 Cell 5		X		X		X	5
 Cell 6		X		X		X	6


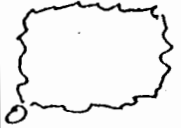

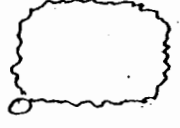

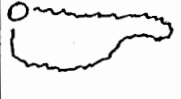


# SPARTON ELECTRONICS

Rapid Infiltration Ponds  
Surface Water Pattern  
MAY 2002

Week 1 Date 9 <sup>th</sup>		Week 2 Date 15 <sup>th</sup>		Week 3 Date 23 <sup>rd</sup>		Week 4 Date 29 <sup>th</sup>	
							
	 SINK HOLE ↗		 SINK HOLE ↗ Filled w/H <sub>2</sub> O		 ↑ Filled		 ↑ Filled

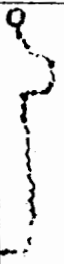
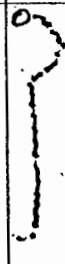
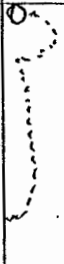
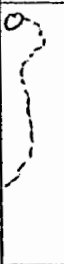


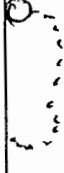
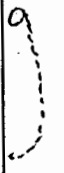
# SPARTON ELECTRONICS

Rapid Infiltration Ponds Surface Water Pattern  
JUNE 2002

Week 1 / Day 06		Week 2 / Day 13		Week 3 / Day 19		Week 4 / Day 28	
0		0		0		0	
0		0		0		0	
0		0		0		0	
0		0		0		0	

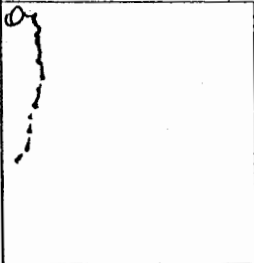
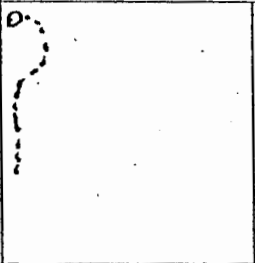
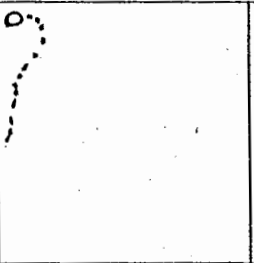
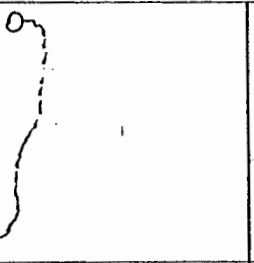
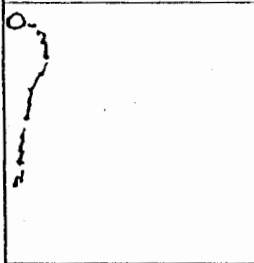
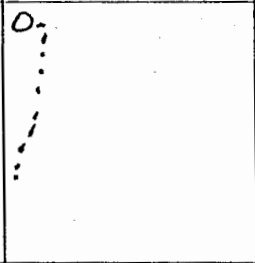
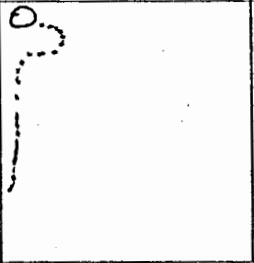
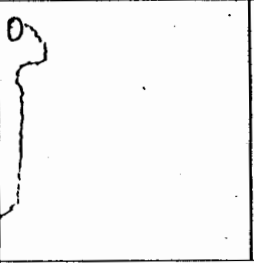
# SPARTON ELECTRONICS

Rapid Infiltration Ponds Surface Water Pattern  
JULY 2002

Week 1 / Day 10		Week 2 / Day 16		Week 3 / Day 23		Week 4 / Day 29	
							
							

# SPARTON ELECTRONICS

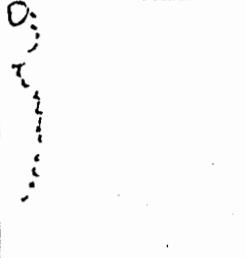
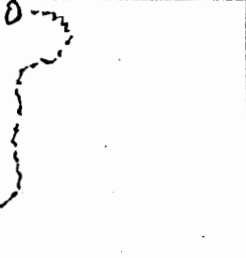
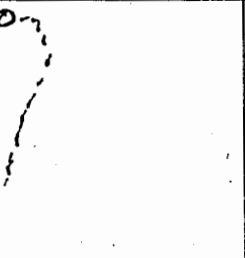

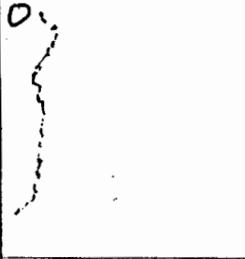

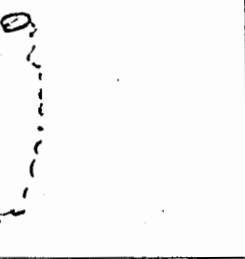
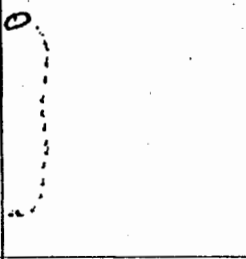
## Rapid Infiltration Ponds Surface Water Pattern AUGUST 2002

Week 1 / Day 02		Week 2 / Day 16		Week 3 / Day 21		Week 4 / Day 29	
							
							



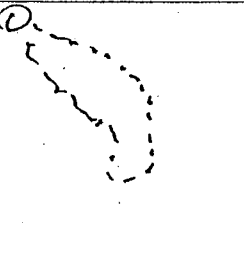
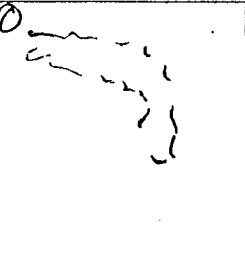
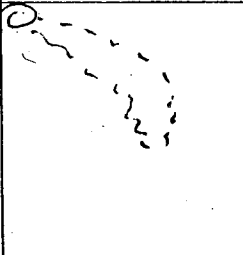
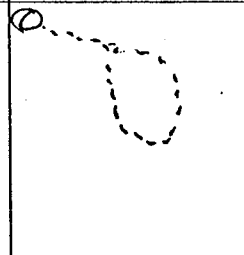
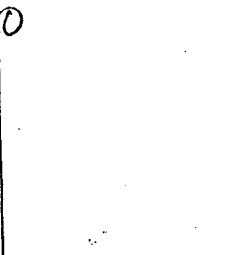
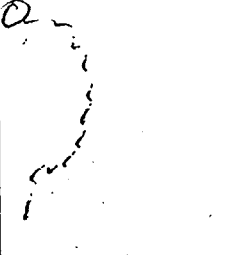
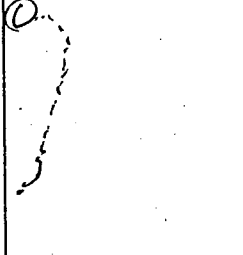
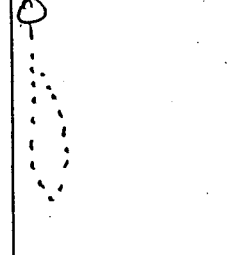
# SPARTON ELECTRONICS

## Rapid Infiltration Ponds Surface Water Pattern SEPTEMBER 2002

Week 1 / Day 03		Week 2 / Day 13		Week 3 / Day 19		Week 4 / Day 25	
							
							

# SPARTON ELECTRONICS

Rapid Infiltration Ponds Surface Water Pattern  
OCTOBER 2002

Week 1 / Day 08		Week 2 / Day 15		Week 3 / Day 22		Week 4 / Day 30	
							
							

# SPARTON ELECTRONICS

Rapid Infiltration Ponds Surface Water Pattern  
NOVEMBER 2002

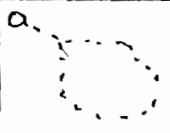
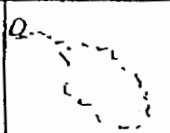
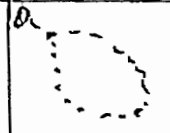

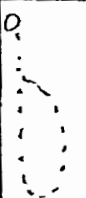
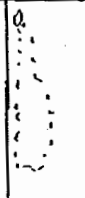
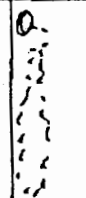

Week 1 / Day		Week 2 / Day		Week 3 / Day		Week 4 / Day	

FHA INU

111 11.00 NEW CONDUCT

# SPARTON ELECTRONICS

## Rapid Infiltration Ponds Surface Water Pattern DECEMBER 2002

Week 1 / Day 02		Week 2 / Day 11		Week 3 / Day 19		Week 4 / Day 28	
							
							

F. 04

FHA NO.

FED 03 03 WED 03 11 11