

John K

**HURST ENGINEERING SERVICES**

P.O. Box 220 \* Bosque, N. M. 87006 \* (505) 861-0987 or 450-4630

June 21, 2001

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

Mr. James Bearzi, Chief  
Hazardous & Radioactive Materials Bureau  
New Mexico Environment Department  
P. O. Box 26110  
Santa Fe, NM 87502-6110

Albuquerque City Attorney  
Legal Department (Attention: John Stomp / Bruce Thompson)  
P.O. box 2248  
Albuquerque, New Mexico 87103

Dear Messrs. Hebert, Bearzi and Stomp:

Re: Consent Decree; Albuquerque v. Sparton Technology, Inc.  
No. CV 97 0206 (D.N.M.); D.J. No. 90-7-1-875  
Public Involvement Plan - Transmission of 2001 Fact Sheet.

Pursuant to the requirements of Attachment B of the Consent Decree, the attached Fact Sheet was distributed to notification list entities on June 19<sup>th</sup>, 2001.

If you have any questions, please feel free to give me a call.  
Respectfully,

Hurst Engineering Services



Tony Hurst  
Project Coordinator for Sparton Technology Inc.

AJH:ajh

Attachment: Fact Sheet dated June 14, 2001.

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**FACT SHEET**  
**An Update on Sparton Technology Coors Road Facility, Albuquerque, New Mexico.**  
**6-14-2001**

Sparton Technology, Inc., wishes to provide you with information concerning the progress of the current and planned environmental remediation activities at their former plant at 9621 Coors Road. Sparton Technology operated a defense electronics component manufacturing plant at this location from 1961 through 1994. In the late 1980's it was determined that several industrial solvents had impacted soil and groundwater. A series of investigations over the ensuing years detailed the nature and extent of the solvent contamination. Trichloroethylene (TCE), 1,1,1-trichloroethane (TCA) and lesser amounts of methylene chloride (MeCL), acetone, and 1,1-dichloroethylene (DCE) were the primary constituents impacting soil, soil gas, and groundwater. Groundwater sampling further indicated that these constituents had migrated off site up to one-half mile to the northwest of the plant. Various studies have indicated that the contaminant plume has not impacted any existing supply wells.

Sparton Technology began environmental remediation activities at the plant in 1983. In late 1988 Sparton installed a groundwater recovery and treatment system on site. During the next 10 years extensive investigation, installation of monitoring wells, and negotiations to establish appropriate remediation measures were undertaken. In 1998, additional remediation activities were implemented. All cleanup activities are now being implemented pursuant to the requirements reached between Sparton Technology, Inc., EPA, the City of Albuquerque, the Bernalillo County Commissioners, the New Mexico Environment Department, the New Mexico Attorney General's Office, and the New Mexico Office of the Natural Resources Trustee, as documented in a Consent Decree [CIV 97 0206 LH/JHG (D.N.M.)] dated March 3, 2000, which is filed with the U.S. District Court for the District of New Mexico. These remedial measures consist of:

- (a) The installation and operation of an off-site containment system;
- (b) The operation of an on-site, 400-cfm Soil Vapor Extraction (SVE) system<sup>1</sup> for an aggregate period of one year.
- (c) The installation and operation of a source containment system.

The goals of these remedial measures are:

- (a) To control hydraulically the migration of the off-site plume;
- (b) To reduce contaminant concentrations in Vadose-zone<sup>2</sup> soils in the on-site area and thereby reduce the likelihood that these soils would contribute to any groundwater contamination;
- (c) To control hydraulically any potential source areas that may be continuing to contribute to groundwater contamination at the on-site area;
- (d) In the long-term, restore the groundwater to beneficial use.

The installation of the off-site containment system, consisting of a containment well, a treatment system, an infiltration gallery, and associated conveyance and monitoring components began in late 1998 and was completed in early May 1999. The off-site containment well began operating on December 31, 1998. Except for a brief interruption in late April and early May 1999 to connect it to the treatment system and infiltration gallery, the well has operated continuously since that date.

The 400-cfm SVE system began operating on April 10, 2000.

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<sup>1</sup> The Soil Vapor Extraction system uses a vacuum pump to remove vapors of contaminant from the soil pores above the zone of saturation.

<sup>2</sup> The Vadose zone is that portion of the soil below the ground surface and above the zone of saturation.

The source (on-site) containment system is currently under construction and is expected to be fully operational by April 21<sup>st</sup>, 2002.

**Current Activities:** During 2000, considerable progress was made towards achieving the goal of the remedial measures:

- The off-site containment well was operated at a rate sufficient to contain the plume during 97.4 percent of the time available in 2000. The pumped water was treated and discharged to the infiltration gallery.
- A chromium reduction process was added to the off-site treatment system on December 15, 2000 to control chromium concentrations in the air stripper effluent and thus meet discharge permit requirements for the infiltration gallery;
- The 400-cfm SVE system operated for 206 days between April 10, 2000 and December 31<sup>st</sup>, 2000;
- All permits and licenses required for the implementation of the source containment system were obtained. The system is currently scheduled to be in operation by April 21, 2002;
- Groundwater monitoring was conducted as specified in Attachment A to the Consent Decree. Water levels in all accessible wells and/or piezometers, and the Corrales Main Canal were measured quarterly. Samples were collected for water-quality analyses from monitoring wells and from the influent and effluent of the air stripper at the frequency specified in the Consent Order and applicable permits. Water samples were analyzed for TCE, DCE, TCA and total chromium.
- The groundwater flow and transport model that was developed in 1999 to simulate the hydrogeologic system underlying the site was recalibrated and used to simulate TCE concentrations in the aquifer from start-up of the off-site containment well in December 1998 through November 2001. Calibration and improvement of the model will continue next year.

The off-site containment well operated at an average rate of about 216 gpm during 2000, prevented expansion of the contaminant plume throughout the year. A total of 114 million gallons were pumped from the well. This pumped water represents about 10 percent of the initial volume of contaminated groundwater (pore volume). The total volume of water pumped since the start of the well operation on December 1998 is 231 million gallons and represents 20 percent of the initial pore volume.

Approximately 480 kg (1070 lbs) of contaminants consisting of 460 kg (1020 lbs) of TCE and 20 kg (50 lbs) of DCE were removed from the aquifer by the off-site containment well during 2000. The total mass that was removed since the beginning of the off-site containment well is 860 kg (1900 lbs) consisting of 820 kg (1810 lbs) of TCE and 40 kg (90 lbs) of DCE. This represents about 25 percent of the contaminant mass (26 percent of the TCE and 21 percent of the DCE mass) estimated to be dissolved in the aquifer prior to operation of the containment well.

While the contaminant mass has been substantially reduced, exemplified by concentration reductions, the aerial extent of the TCE plume, and hence the volume of contaminated groundwater, did not change significantly during 2000.

The concentrations of TCE in the influent to the 400-cfm SVE system decreased from about 20 mg/m<sup>3</sup> at the beginning of the operation in April 2000 to less than 1 mg/m<sup>3</sup> near the end of the year. It is roughly estimated that the system probably removed 2 to 5 kg of contaminant mass from the on-site soils, based on the duration of the operation, its flow rate, and the range of the observed concentrations.

**Future Plans:** Data collection will continue in accordance with the Groundwater Monitoring Program Plan and site permits, and as necessary for the evaluation of the performance of the remedial systems. As additional data are being collected, calibration and improvement of the flow and transport model developed to assess aquifer remediation will continue.

The off-site containment system will continue to operate at the current average operating rates of 220 to 225 gpm.

The 400-cfm SVE system, which began operating on April 10, 2000 and operated for 206 days during 2000, will continue to be operated until June 15, 2001 to meet the Consent Decree requirement of one full year of operation.

Sparton has obtained all necessary permits, contracts, and license agreements necessary for the construction and operation of the source containment system. The last license was obtained on December 27, 2000. Sparton submitted the Construction Work Plan for the source containment system on January 31, 2001. The plan was approved and construction has begun. The system is currently scheduled to be in operation by April 21, 2002.

Sparton, through its off-site ground water recovery system, has prevented further expansion of the ground water contaminant plume. The SVE system is being prepared for close down, and testing will be performed to verify that clean-up objectives have been met. The source containment system will be fully operational by April 21<sup>st</sup> next year.

Copies of the Consent Decree and its associated remediation work plans as well as historical investigation/remedial work plans and reports submitted to the City, County, NMED, and EPA are available for review at the:

Taylor Ranch Public Library, (Telephone # 505 897-8816) located at:  
5700 Bogart NW, Albuquerque, NM 87120.

City of Albuquerque Department of Public Works, (Telephone # 505 768-2561)  
located at:  
One Civic Plaza NW, Albuquerque, NM 87103

New Mexico Environment Department/HWB District 1,  
(Telephone # 505 841-9033) located at:  
4131 Montgomery Boulevard NE, Albuquerque, NM 87109

Alternatively, you may contact Mr. Tony Hurst, Sparton Technology's local representative, at (505) 861-0987 or Mr. R. Jan Appel of Sparton Technology at (517) 787-3952.

**HURST ENGINEERING SERVICES**

**P.O. Box 220 \* Bosque, N. M. 87006 \* (505) 861-0987 or (505) 459-4630**

***FAX:*** 505-428-2567

**To: James Bearzi**

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① Fact Sheet & Notification Letter