

ST 2002

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

August 29, 2002

Chief - Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-7-1-875

2002

Director, Compliance Assurance and Enforcement Division
United States Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Regional Counsel
Office of Regional Counsel
United States Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Albuquerque City Attorney
Legal Department
P.O. box 2248
Albuquerque, New Mexico 87103

County Attorney
One Civic Plaza, N.W., Tenth Floor
Albuquerque, New Mexico 87103

Chief, Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110

Director, Environmental Enforcement Division
New Mexico Attorney General's Office
P.O. Drawer 1508
Santa Fe, New Mexico 87504

New Mexico Natural Resources Trustee
Office of the New Mexico Natural Resources Trustee
1435 St. Francis Drive, Suite 208
Santa Fe, New Mexico 87505

Secretary Attn: Ms. Susan Widener
Sparton Technology, Inc.
2400 Ganson Street
Jackson, Michigan 49202

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

August 29, 2002

Re: Consent Decree; Albuquerque v. Sparton Technology, Inc.
No. CV 97 0206 (D.N.M.); D.J. No. 90-7-1-875
MW-71R: Construction Diagram and Sample Log

Dear Parties:

Attached is a Construction Diagram and a sample Log for Monitoring Well 71 Replacement (MW-71-R). As noted, this well was completed in February 2002. These documents can be added to your copies of the Consent decree.

In addition, the July, 2002 Public Involvement Plan Fact Sheet is attached for your information.

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

Cc: → Mr. James Bearzi
Mr. Michael Hebert

HURST ENGINEERING SERVICES
17990 Clydesdale Road* Colorado Springs, CO 80908
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July 1st, 2002

To: All Notification list Entities

Sparton Technology, Inc., a New Mexico corporation (Sparton Technology) 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.

Property owners over and adjacent to areas where corrective measures are being implemented are being provided with this update of activities. The attached fact sheet summarizes these activities and indicates how additional information can be obtained.

Sincerely



Tony Hurst
Project Coordinator for Sparton Technology Inc.

FACT SHEET

An Update on Sparton Technology's Coors Road Facility, Albuquerque, New Mexico. July 01, 2002

Sparton Technology, Inc., a New Mexico corporation (Sparton Technology) 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 among various interested parties 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, 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) system¹ 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-zone² 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, to achieve the performance standards described in the Consent Decree

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

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

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

connect it to the treatment system and infiltration gallery, the well has been in operation since that date.

The 400-cfm SVE system began operation on April 10, 2000, and completed operation on June 15, 2001.

Construction of the source (on-site) containment system construction was completed in December 2001. It began operating on January 3, 2002.

Current Activities: During 2001, considerable progress was made towards achieving the goal of the remedial measures:

- The off-site containment well was operated at 97.3 percent of the time available in 2001 which is at a rate sufficient to contain the plume. 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. During 2001, the chromium concentrations in the pumped water decreased well below the New Mexico groundwater standard. As a result, chromium treatment was discontinued on November 1, 2001.
- The 400-cfm SVE system operated for 165 days between January 1, 2001 and June 15, 2001. Soil gas sampling was conducted at the plant site in September and October 2001 to evaluate the performance of the soil vapor extractor system.
- Construction of the source containment system was completed in December 2001. The system was placed into operation on January 3, 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.
- A 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 2001, preventing 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 344 million gallons and represents 31 percent of the initial pore volume.

Approximately 550 kg (1200 lbs) of contaminants consisting of 520 kg (1140 lbs) of TCE and 27 kg (60 lbs) of DCE were removed from the aquifer by the off-site containment well during 2001.

The total mass that was removed since the beginning of the off-site containment well is 1410 kg (3100 lbs) consisting of 1340 kg (2950 lbs) of TCE and 70 kg (150 lbs) of DCE. This represents about 39 percent of the contaminant mass (41 percent of the TCE and 35 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 2001.

The 400 cfm soil vapor extraction system operated for a total of 372 days from April 10, 2000 to June 15, 2001. The duration of operation of the system and the results of the September and October soil gas sampling indicated the system had met the requirements of the Consent Decree and operation of the system was no longer required.

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 rate of 215 to 225 gpm.

Sparton submitted the Construction Work Plan for the source containment system on January 31, 2001. Construction was completed in December 2001, and the system was placed into operation on January 3, 2002, 108 days ahead of schedule.

Sparton, through its off-site containment system, has prevented further expansion of the ground water contaminant plume. The SVE system was closed down on June 15, 2002, having met its clean-up objectives. The source containment system became fully operational as of January 3, 2002.

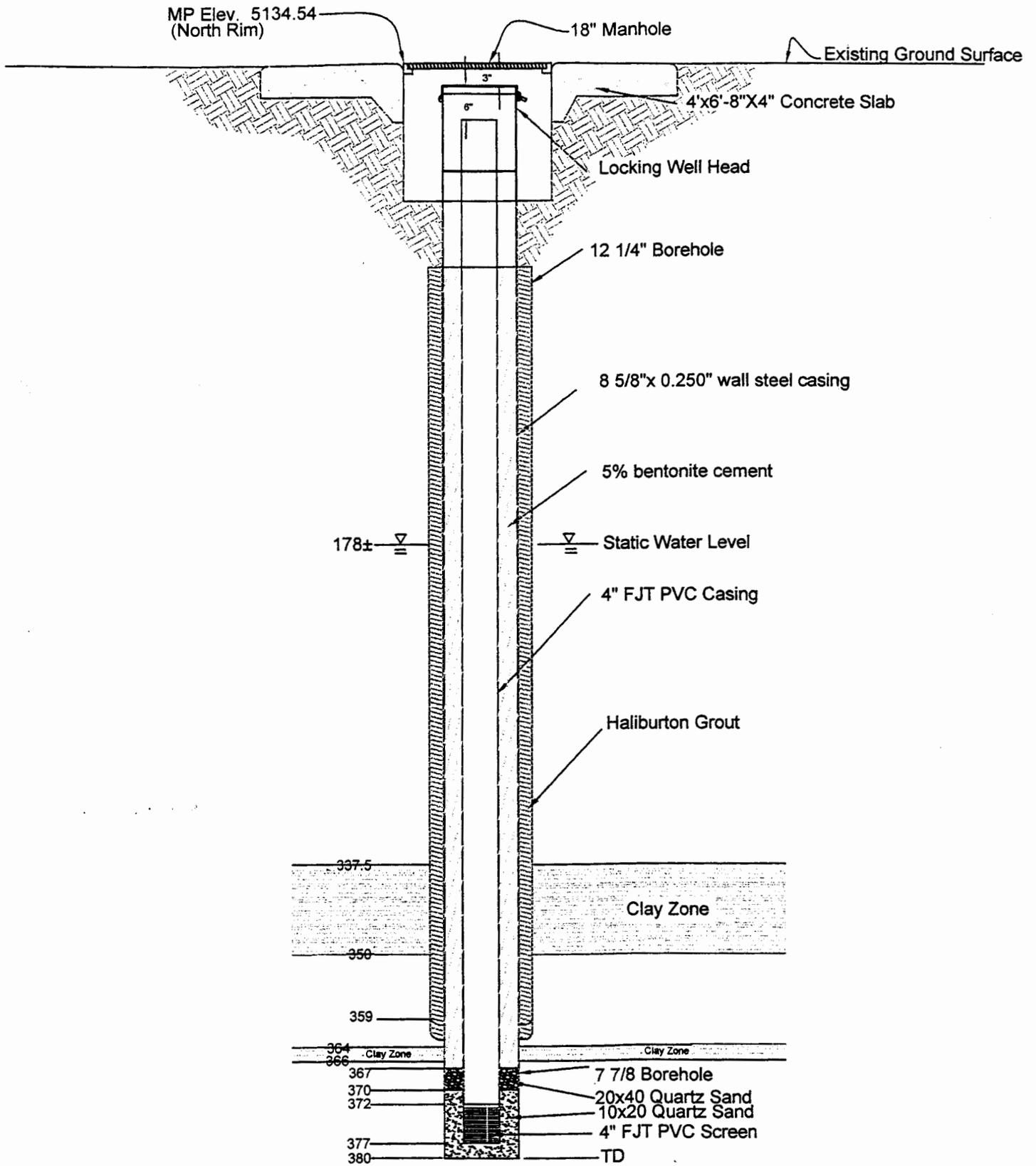
Copies of the Consent Decree and its associated remediation work plans as well as historical investigation/remedial work plans and reports submitted to the City, County, NMED, and EPA are available for review at the:

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
(Telephone # 505 428-2500) located at:
2905 Rodeo Park Drive East, Building 1, Santa Fe, NM 87505-6303

Alternatively, you may contact Mr. Tony Hurst, Sparton Technology's representative, at (505) 220-1943 or Ms. Susan Widener of Sparton Technology at (517) 787-3256.



MW-71-R
Construction Diagram
SPARTON

METRIC

Corporation

SAMPLE LOG

Borehole Number MW-71R Borehole Location N. 1525712.2, E. 375531.4
Property Owner Sparton Technology, Inc.
Sample Logger Joe Sandoval and Peter Metzner, METRIC Corproation
Driller Rodgers Environmental Services
Drilling Medium Mud rotary
Date of Completion February 20, 2002 Ground Elevation 5134.0 ft.

Depth (feet)	Thickness (feet)	Stratigraphic Description
0 - 10	10	Grayish orange (10YR 7/4), poorly sorted, subangular to subrounded, fine to very coarse sand.
10 - 45	35	Grayish orange (10YR 7/4), poorly sorted, subangular to subrounded, fine sand to granule gravel.
45 - 65	20	Grayish orange (10YR 7/4), poorly sorted, subangular, very fine to coarse sand.
65 - 75	10	Grayish orange (10YR 7/4), poorly sorted, subangular, fine to coarse sand.
75 - 100	25	Grayish orange (10YR 7/4), medium sorted, subangular, fine to coarse sand.
100 - 105	5	Grayish orange (10YR 7/4), poorly sorted, subangular, very fine to very coarse sand.
105 - 110	5	Grayish orange (10YR 7/4), medium sorted, subangular, fine to coarse sand.
110 - 115	5	Grayish orange (10YR 7/4), medium sorted, subangular, medium to very coarse sand.
115 - 120	5	Grayish orange (10YR 7/4), poorly sorted, subangular, very fine to coarse sand.

METRIC

Corporation

SAMPLE LOG

Borehole Number MW-71R Borehole Location N. 1525712.2, E. 375531.4

<u>Depth (feet)</u>	<u>Thickness (feet)</u>	<u>Stratigraphic Description</u>
120 - 135	15	Grayish orange (10YR 7/4), poorly sorted, subangular to subrounded, fine to coarse sand.
135 - 140	5	Light brownish gray (5YR 6/1), medium sorted, subangular, medium to coarse sand.
140 - 150	10	Light brownish gray (5YR 6/1), well sorted, subangular, coarse to very coarse sand.
150 - 165	15	Light brownish gray (5YR 6/1), medium sorted, subangular, fine to coarse sand.
165 - 185	20	Light brownish gray (5YR 6/1), well sorted, subangular, very coarse sand to granule gravel.
185 - 200	15	Light brownish gray (5YR 6/1), medium sorted, subangular to subrounded, medium to very coarse sand.
200 - 210	10	Grayish orange (10YR 7/4), poorly sorted, subangular, clayey, very fine sand to granule gravel.
210 - 220	10	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, clayey, very fine to coarse sand.
220 - 225	5	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, clayey, very fine to very coarse sand.
225 - 235	10	Pale yellowish brown (10YR 6/2), poorly sorted, subangular to subrounded, coarse to very coarse sand.
235 - 290	55	Pale yellowish brown (10YR 6/2), poorly sorted, subangular to subrounded, very fine to very coarse sand.

METRIC
Corporation

SAMPLE LOG

Borehole Number MW-71R Borehole Location N. 1525712.2, E. 375531.4

<u>Depth (feet)</u>	<u>Thickness (feet)</u>	<u>Stratigraphic Description</u>
290 - 330	40	Pale yellowish brown (10YR 6/2), medium sorted, subangular, medium to very coarse sand.
330 - 337.5	7.5	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, fine to coarse sand with 10% clay layers.
337.5 - 340	2.5	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, very fine to very coarse sand with 20% clay layers.
340 - 344.5	4.5	Pale yellowish brown (10YR 6/2), medium sorted, subangular, fine to coarse sand with 50% clay layers.
344.5 - 345	0.5	Pale yellowish brown (10YR 6/2) clay.
345 - 350	5	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, coarse sand with 20% clay layers.
350 - 364	14	Pale yellowish brown (10YR 6/2), medium sorted, subangular, fine to coarse sand.
364 - 365	1	Pale yellowish brown (10YR 6/2) clay.
365 - 366	1	Pale yellowish brown (10YR 6/2) clay with sand layers.
366 - 375	11	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, very fine sand to granule gravel.
375 - 380	5	Pale yellowish brown (10YR 6/2), poorly sorted, subangular, medium sand to granule gravel.