



 ENTERED

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ALBUQUERQUE**

THOMAS C. TURNEY
STATE ENGINEER

DISTRICT 1
121 TIJERAS, NE, STE. 2000
ALBUQUERQUE, NM 87102-3400
(505) 841-9480

July 13, 2000

FILE: RG-73531

Sparton Technology, Inc.
4901 Rockaway Blvd., NE
Rio Rancho, NM 87124

Greetings:

Enclosed is your copy of the above-numbered Permit to Divert the Underground Waters of the State of New Mexico for Pollution Plume Control and Recovery and to Offset Surface Water Depletions which has been approved subject to the conditions set forth on the reverse side thereof.

No water shall be diverted from Well RG-73531-T except for pollution plume control and recovery purposes. This permit shall expire at the completion of the remedial operation or on May 31, 2030, whichever occurs first. Well RG-73531-T shall then be capped or plugged and a written report of the action shall be filed with this office of the State Engineer.

Please read the Conditions of Approval carefully.

Very truly yours,

A handwritten signature in cursive script that reads "Andrew L. Lieuwen".

Andrew L. Lieuwen
Water Resource Master

ALL:sjr
Enclosure as stated
cc: Santa Fe SEO

CONDITIONS OF APPROVAL

1. This application is approved as follows:

Permittee: Sparton Technology, Inc.

Permit No. RG-73531-T

Priority: Not Applicable

Source: Ground Water

Point of Diversion: Well RG-73531-T located within 745 feet of a point where X=376,788 feet and Y=1,524,463 feet, NMCS Central Zone; also located within the SW1/4 of SE1/4 of Section 7, Township 11 North, Range 3 East, NMPM, projected, in Town of Alameda Grant; also located approximately 1/2 mile southwest of the Cottonwood Mall on Tract B-2, Adobe Wells Subdivision, Bernalillo County, New Mexico.

Purpose of Use: Pollution plume control and recovery

Place of Use: Sparton Technology, Inc. facility located in the Town of Alameda Grant at 9621 Coors Blvd. NW, Albuquerque, New Mexico.

Amount of Water:

Diversion: 121 acre-feet per annum

Consumptive use: 15 acre-feet per annum

2. The total diversion of water from well RG-73531-T shall not exceed 121 acre-feet per annum and consumptive use shall not exceed 15 acre-feet per annum.
3. Well RG-73531-T and the point of discharge into the infiltration gallery shall be equipped with a totalizing meter, or meters, of a type and at a location(s) approved by and installed in a manner acceptable to the State Engineer.
4. Records of the total amount of water diverted from well RG-73531-T and the discharge into the infiltration gallery shall be submitted in writing to the State Engineer District 1 Office on or before the 10th day of each month for the preceding calendar month.
5. On or before October 1 of each year the permittee shall provide the State Engineer evidence of the amount of San Juan/Chama contract water purchased from the Village of Los Lunas for the following year in the consumptive use amount shown under Condition number 2 to offset the depletion to the Rio Grande stream system caused by the exercise of this permit, including transportation losses. The diversion of water shall be subject to the agreement with the Village of Los Lunas and to the amount of water purchased annually.

CONDITIONS OF APPROVAL (continued)

6. No water shall be diverted under this permit unless the permittee has submitted documentation satisfactory to the State Engineer demonstrating that the permittee has secured water rights equal to or exceeding the annual consumptive use.
7. No water shall be diverted from well RG-73531-T except for pollution plume control and recovery purposes. This permit shall expire at the completion of the remedial operation or on May 31, 2030, whichever occurs first. Well RG-73531-T shall then be capped or plugged and a written report of the action shall be filed with this office of the State Engineer.
8. The permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

Witness my hand and seal this 13th day of July, A.D., 2000

Thomas C. Turney
State Engineer

By:

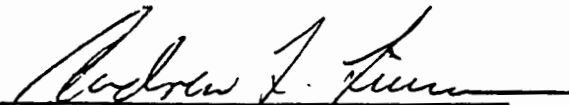

Andrew L. Lieuwen, District 1

Exhibit A

3. The well is to be located approximately ½ mile southwest of the Cottonwood Mall on Tract B-2, Adobe Wells Subdivision, Bernalillo County, New Mexico, which tract adjoins the Sparton Technology, Inc. facility located at 9621 Coors Blvd., NW, Albuquerque, NM. The well will be located within the SW1/4 of SE1/4 of Section 7, Township 11 North, Range 3 East, NMPM, projected, in Town of Alameda Grant. Alternatively, the well is to be located within a radius of 745 feet of a point having New Mexico Coordinate System (Central Zone) coordinates X = 376,788 feet east and Y = 1,524,463 feet north. See also Exhibit A-1 attached hereto.

5. The maximum quantity of water to be diverted and beneficially used is 75 GPM, or 121 AFY diversion. No consumptive use will result if this application is granted, with the exception of the evaporation that will occur as part of the process of recharging the groundwater by use of rapid infiltration ponds, as described in paragraph 7.c), below.

- a) The consumptive use of the evaporation is calculated to be 4.70 AFY. See Exhibit A-2, attached hereto. In the event that the rapid infiltration process causes a greater annual consumptive use, the Applicant requests approval to consume up to 15 AFY.
- b) The applicant proposes to offset the effects of its consumptive use by transferring to the proposed well up to 15 AFY of San Juan/Chama Water under contract with the Village of Los Lunas, through the year 2015, after which time the Applicant will seek extension of the contract. Because Applicant proposes to operate the containment well for remediation purposes through 2030, Applicant requests the following condition of approval: "No water shall be diverted under this permit unless the Applicant has submitted documentation satisfactory to the State Engineer demonstrating Applicant has secured water equal to its annual consumptive use, up to 15 AFY, to offset the effects of pumping and remediation under this permit."

7. Additional statements or explanations:

- a) Need for pollution control and recovery: Groundwater impacted by chlorinated solvents exists at or near Applicant's Coors Road facility, 9621 Coors Blvd., NW, Albuquerque, New Mexico. Applicant proposes to use the applied for containment well to prevent movement of material amounts of solvents off of the Coors Road facility property.
- b) Underground water source: Rio Grande underground basin.
- c) Return to aquifer of cleaned water and place of discharge: Once the contaminated water is pumped, it will be treated through an air stripper at the Coors Road facility site, transported through a discharge pipeline located on the site, and then returned to the aquifer by discharge to rapid infiltration ponds also located on the Coors Road

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facility site. See Exhibit A-1 for a diagram of the containment well's location, air stripper and discharge locations. The rapid infiltration ponds, where discharge will occur, will be located on the northeastern portion of the Sparton Coors Road facility site, on approximately three acres, within the SE1/4, Section 7, Township 11 North, Range 3 East, projected, in Town of Alameda Grant. See Exhibit A-1.

- d) Estimated maximum period of time for completion of the pollution control and recovery operations: Pumping of the containment well and discharges are expected to last at least 30 years. Applicant will periodically assess the continued need for the well.
- e) Method of Measurement: Totalizing meters acceptable to the State Engineer.
- f) Disposition of well after completion of pumping related to remediation program: Applicant intends to either plug this well or to maintain it as a monitor well.
- g) Statement of non-impairment of existing rights: The proposed containment of groundwater will result in a minimal consumptive use of water which will be entirely offset by retiring surface water and, therefore, will not impair existing water rights.

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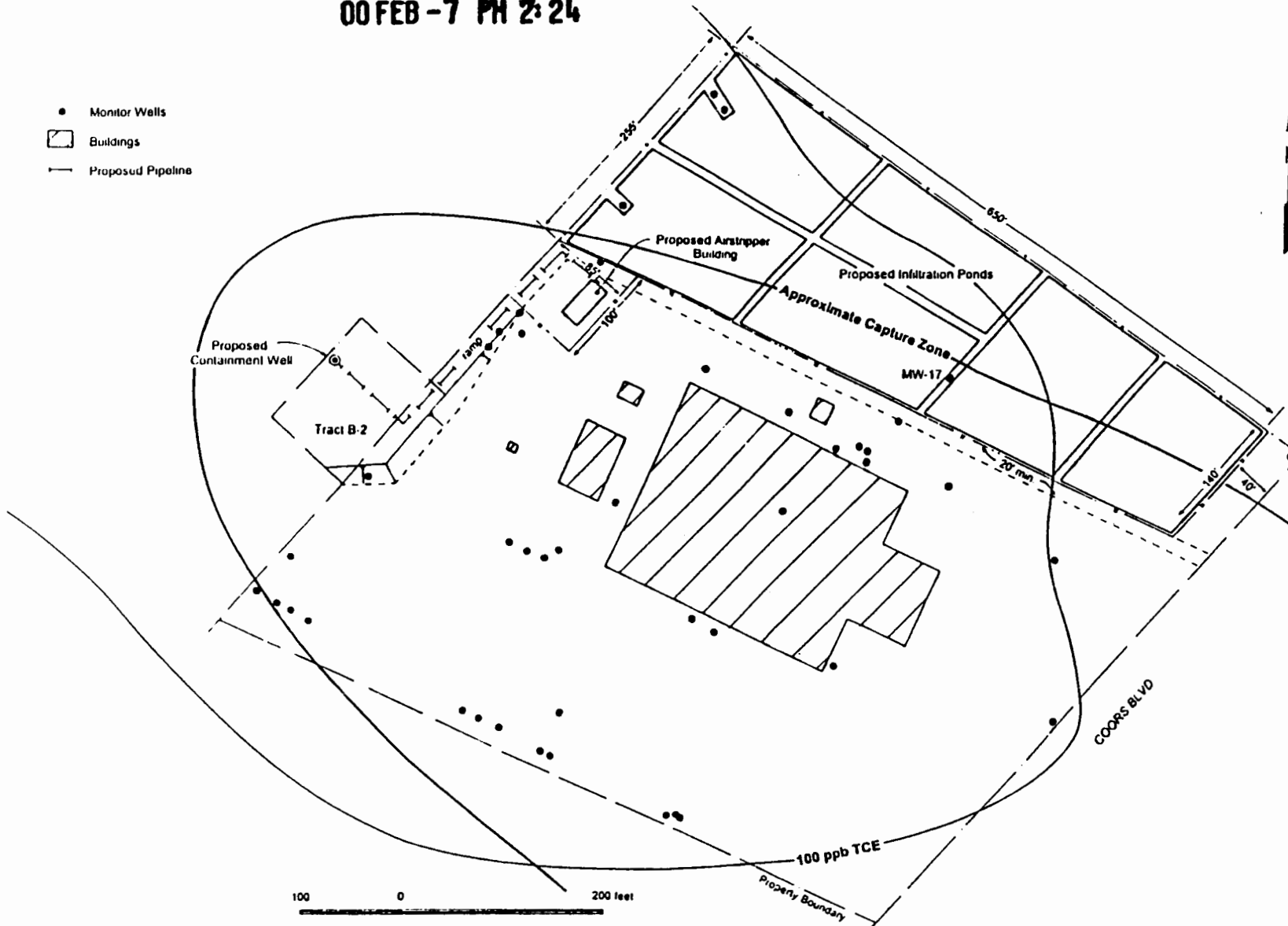
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- Monitor Wells
- Buildings
- Proposed Pipeline

EXHIBIT A-1

SOURCE CONTAINMENT WELL AND
INFILTRATION PONDS LOCATIONS
SPARTON TECHNOLOGY, INC.

CONSUMPTIVE USE CALCULATIONS

EXHIBIT A-2

TO
SPARTON TECHNOLOGY, INC.
APPLICATION FOR PERMIT
TO DIVERT GROUNDWATER
(75 gpm)
FOR
GROUNDWATER REMEDIATION

PREPARED BY
METRIC CORPORATION
ALBUQUERQUE, NEW MEXICO

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NOVEMBER 1999

Assumptions:

Maximum Diversion: 75 gpm = 120.98 AFY
Discharge Location: Rapid Infiltration Ponds on north side of Sparton's Coors Road property.

Estimated Exposed Water Surface: 1.1 ac ⁽¹⁾

Average Annual Evaporation = Rate 73.18 in/yr = 6.09 ft/yr ⁽²⁾

According to Linsley, 1958

Lake Evaporation = 0.70
Pan Evaporation

Lake Evaporation at Sparton =

$$\frac{73.18 \text{ in}}{\text{yr}} \times \frac{1 \text{ ft}}{12 \text{ in}} \times 0.7 = 4.27 \frac{\text{ft}}{\text{yr}}$$

Consumptive Use: 1.1 ac x 4.27 ft/yr = 4.70 AFY

Recommendation:

It is recommended that the application be made for consumptive use of 6.00 AFY to account for additional water surface during change over periods when the water is switched from one set of ponds to another.

Maximum Evaporative Loss = $\frac{6.00 \text{ AFY C.U.}}{120.98 \text{ AFY Div.}} \times 100\% = 5\%$

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- (1) Based on 2.2 acre pond area with one half of the area receiving water at any time.
(2) Based on Pan Evaporation from 1962 - 1996 at Los Lunas, New Mexico Experiment Station, (see TABLE 1).

TABLE 1
PAN EVAPORATION
AVERAGE MONTHLY TOTAL EVAPORATION
Record of Date 1962 - 1996

Source: Western Region Climate Center
 NOAA Reno, Nevada
 Jim Ashby (702) 677-3106
 Location: Los Lunas Experience Farm

MONTH	INCHES	RECORD (yrs.)
January	1.87	1
February	2.81	3
March	5.27	35
April	7.86	35
May	9.73	35
June	10.40	35
July	10.10	35
August	8.74	35
September	6.57	35
October	4.60	35
November	2.78	35
December	2.45	1
	73.18	

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