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**NM ENVIRONMENT DEPARTMENT  
OFFICE OF THE SECRETARY**

**PROPOSAL**

**Expansion of Interim Measures (IM)  
Coors Road Facility  
Sparton Technology, Inc.  
Albuquerque, New Mexico**

**Prepared for:**

**Sparton Technology, Inc.  
Rio Rancho, New Mexico**

**Prepared by:**

**Black & Veatch  
Dallas, Texas**

**in Association With**

**Metric Corporation  
Albuquerque, New Mexico**

**Revised, December 6, 1996**

## **Objectives**

The objectives of this proposal are three-fold:

1. To address high volatile organic constituent (VOC) concentrations in groundwater at the location of groundwater monitoring wells MW-32 and MW-42.
2. To evaluate the cause of erratic VOC detections historically observed during periodic sampling of groundwater monitoring well MW-32.
3. To enhance interim onsite mass removal.

Lower lower flow zone (LLFZ) groundwater monitoring well MW-32 has historically exhibited erratic detections of volatile organic constituents (VOC). Periodically, it exhibits anomalously high concentrations relative to surrounding adjacent wells and also periodically exhibits anomalous constituents. Further, out of 13 cluster well locations, well MW-32 is the bottom well in the only cluster showing an increase in VOC concentration with depth.

The source of the erratic detections is a matter of speculation, but would include completion problems such as a defective grout seal or a cracked well casing allowing impacts of shallow contamination. Sampling procedures have been ruled out as a cause through detailed resampling and multiple split procedures.

One procedure to determine the cause of the erratic behavior would be to pump the well for an extended period and observe the effect on sampled water quality. If well MW-32 does represent a zone or area of higher VOC concentration, the extended pumping from this well would also be a form of source control and containment. It should be noted that MW-32 is also immediately downgradient of the source area. As detailed in the pump test proposal revised December 6, 1996, an additional non-detect monitor well is proposed below MW-32 to define the lower vertical limits of the VOC plume.

Upper lower flow zone (ULFZ) groundwater monitoring well MW-42 has historically exhibited high VOC concentrations and is outside the recovery area of the existing IM system. In addition, well MW-42 is also down gradient of the source area.

### **Proposed IM Expansion**

The current IM system recovers a total of approximately 2 gpm from the upper portion of the aquifer. The treatment capacity of the IM system is 20 gpm. Well installation data for MW-32 and MW-42 indicate that combined systems pumping rates of 15 to 20 gpm could possibly be achieved. Actual production rate would be determined by installing a temporary pump in each well and conducting a limited pumping test to determine production pumping rate and drawdown. A production pump would then be sized and installed. Discharge would be routed to the existing onsite treatment unit. It should be noted that wells MW-32 and MW-42 are located close to the treatment unit -- allowing economical, secure connection. Increasing the recovery rate to 20 gpm is conditioned to the ability to obtain permits to either discharge to the sanitary sewer or, preferably, to discharge to the Calabacillas Arroyo through the existing storm sewer system.

Installation data would be included in a report updating the current onsite groundwater recovery well system. The report would be submitted to NMED for review and approval. Production and impact on water quality would be evaluated on a periodic basis and furnished as a part of the site operation reporting.

### **Schedule**

The current IM system is permitted for a production of 20 gpm. Adding wells MW-32 and MW-42 to the IM system is simply a matter of conducting a limited pumping test for sizing purposes, and then installing the pump, controls, and connecting piping. It is estimated that wells MW-32 and MW-42 could be recovering water within two months of authorization to discharge treated water to the storm sewer entering the Calabacillas Arroyo.