



3.2.2 Process Air Stream Monitoring and Air Sampling

Air monitoring of the SVE and GWT System is performed on a bi-weekly basis. It includes monitoring for VOCs, carbon monoxide, oxygen, lower explosive limit (LEL), hydrogen sulfide, air velocity in cubic feet per minute (CFM), temperature, relative humidity, dew point, and vacuum pressure as specified in the O&M Manual. Air monitoring is performed at the following locations within the system:

- Combined SVE - Influent (pre-treatment),
- Post groundwater Air-Stripper (pre-treatment),
- Post vapor phase carbon vessel 1 – Air Stripper air discharge (post-treatment),
- Post vapor phase carbon vessel 2 – SVE air discharge (post-treatment),
- Sub-slab monitoring points (pre-treatment),

- SVE wells EPA-SVE-1 through EPA-SVE-4 (Shallow and Medium depth)

A summary of estimated PCE recovery rate based on air monitoring results is presented in table 3.

On October 3, 2005, following a review of the REAC SVE System Air Sampling Results for the event performed on July 7, 2005, the active SVE recovery wells were modified in an effort to maximize contaminant recovery rates. Details of the modifications to the active SVE wells prior to and post October 3, 2005 are included in the table below.

Table 1 Modification to Active SVE Wells

SVE Location	Prior to 10/3/05	After 10/3/05
SVE 1	Shallow On	Shallow and Intermediate On
SVE 2	Shallow On	Shallow On
SVE 3	Shallow On	Shallow On
SVE 4	Off	Off
EPA-SVE-4R	On	On
SSA	On	On
SSB-A	On	On
SSB-B	On	Off
SSB-C	On	On
L1	On	On
L2	On	Off

In addition to modifying the active SVE locations, the names of each location were altered in an effort to stay consistent with the USEPA Response Engineering and Analytical Contractor's (REAC) nomenclature. Future weekly monitoring logs will be consistent REACs sample numbers. The laboratory analytical results for REAC's sampling of the SVE locations, performed on July 7, 2005 are included in the Figure 1.

Additional evaluation/enhancement of the SVE recovery rates is ongoing and the installation of several SVE sample port locations was performed on November 1 and 2, 2005. On January 9, 2006, two more SVE sample port locations were installed in the line of SVE 3. The bi-weekly air monitoring logs are included in Appendix F. Estimated PCE removal rates for the SVE system are presented in Table 1. The next bi-weekly air-monitoring event is scheduled for October 9, 2006.