

Industrial Property – Sao Paulo, Brazil

Client Type/Property Type: International Consultant – Industrial Property

Oversight: CETESB

Contaminant: Carbon Tetrachloride and Chloroform

Project Summary:

A comprehensive data management solution and visual SCM was completed for an Industrial Site in *Sao Paulo, Brazil*. Prior to developing the SCM, site data collected over multiple investigation events over a ten year period was migrated into a relational database (EarthSoft's EQUIS). Data was migrated by manual entering and digital transfer that included over 45,000 records (location data, water levels, geologic information, well records, analytical data, etc.). Once the database population was completed, data were queried and exported to Ctech's Mining Visualization System (MVS) for creation of a 3D geologic model and 2D/3D models of groundwater plumes using Ctech's 3D kriging algorithms. Statistical groundwater trend analysis of primary contaminants, were completed for each well. This statistical analysis resulted in creation of a representative data set for current site conditions. Conveyance of the 3D CSM was completed by generating 2D plume maps, cross-sections, and full 4D models (4-D as time) to evaluate site conditions. The visual SCM was integrated directly into design documents by outputting specific design cross sections/maps and provided a visual medium for technical interdisciplinary design teams to discuss design options. In addition, the existing long-term monitoring program was evaluated by determining the statistical significance of existing monitoring wells on the kriged groundwater plume volumes.

