

COVINGTON AND BURLING, LLP

Santa Monica, California

Vadose Zone Modeling to Define Release Timing at an Industrial Site and Remedial Cost Analyses

Covington and Burling, LLP retained Geolex, Inc. (Geolex) to evaluate existing information and data regarding the contamination of soil and groundwater and to evaluate the various remediation activities in the vicinity of a former PaperMate Pen (Gillette Co.) manufacturing facility located in Santa Monica, California. The scope of our retention involved the analysis of site history, plant operating procedures and soil and groundwater contamination detected beneath and in the vicinity of the site. Geolex was asked to make determinations concerning the fate, transport and timing of releases to the environment of chlorinated solvents at the facility and surrounding industrial sites. In order to accomplish this, we performed an extensive analysis of data and technical reports relating to the site and surrounding facilities and reviewed deposition testimony of former employees and environmental experts who had worked at the site. We also reviewed and analyzed other historical environmental data, including aerial photographs and meteorological data, and we reviewed data regarding soil vapor and soil and groundwater contamination detected at the site and in nearby industrial facilities and City of Santa Monica water supply wells.

Geolex also undertook an extensive review of the regulatory history of the site, including information concerning prior remedial investigations, the design of remedial systems and the progress of environmental investigations and response actions at and in the vicinity of the site. We conducted our own site inspection of the facility, designed a boring program and constructed a vadose zone model (using Hydrus 2D/3D) to determine time of transport of TCE and TCE-contaminated soil from the plant floor to groundwater. We then constructed conceptual and numerical models to evaluate the time required for releases at the site to reach groundwater. This enabled us to utilize site-specific data to determine the timing of releases of chlorinated solvents from the degreasing operation within the former PaperMate building.

Geolex was also asked to review an analysis of remedial investigation/remedial action costs incurred at the facility. Geolex performed this evaluation to determine the appropriateness and reasonableness of the management of remedial investigations and associated costs. Using experience from the successful performance of similar remedial investigations and cleanups at similar sites, we developed opinions regarding the management and execution of the project. This analysis concluded that the remedial efforts at the site were conducted in an efficient and appropriate manner and verified that the costs incurred were reasonable. These results were documented in an additional expert report for this site.

In conjunction with this case, Mr. Gutiérrez provided four days of deposition testimony and is anticipated to testify at trial.

Major Project Elements:

- Contaminant hydrogeology
- Field sampling
- Aerial photography interpretation
- Environmental litigation support
- DNAPL fate and transport analysis
- Expert witness testimony
- Evaluation of remedial design performance

