To develop performance standards for a groundwater barrier wall, the RBCA Tool Kit can be run in "backward mode" to determine the applicable groundwater SSTLs based on the site-specific source location, groundwater parameters, and applicable point of exposure. These calculated SSTL values for each COC can then be entered into the software as the Representative Source Concentrations and the software rerun in "forward mode" using the Transient Domenico

Worksheet to determine the predicted steady-state plume concentrations at each point downstream of the source location. As long as an engineered barrier serves to prevent the downstream concentrations from exceeding these allowable levels, the risk limits at the point of exposure will not be exceeded. In other words, the steady-state Domenico plot shows how much the groundwater barrier can leak before it becomes a problem. If a barrier wall is installed, the concentration limits determined in this manner can be used to monitor the performance of the wall.

A similar analysis can be run for the soil leaching pathway by i) entering the actual measured soil COC concentrations and other site-specific soil and groundwater data and ii) running the software in the forward mode, and iii) adjusting the net rainfall infiltration level until you find the maximum level allowable such that none of the COCs cause a risk limit exceedance at the point of exposure. This final rainfall infiltration rate is the maximum seepage that can be allowed by a site cover. This level represents the rate up to which the site cover can leak before it poses a problem.