

Meeting Notes – September 25, 2001 Washington Works Groundwater Model

A meeting was held on September 25, 2001, at EPA headquarters in Philadelphia to discuss the groundwater model developed for the Washington Works Plant in Parkersburg, WV. The meeting was attended by Bill Wentworth (EPA), Jack Hwang (EPA), Glen Stevens (ACOE), Susan Haug? (ACOE), Andrew Hartten and Craig Bartlett (DuPont), and Marj Vetter and Mark Houlday (URS Diamond).

The results of the groundwater modeling effort was included in the Washington Works RFI Report that was submitted to EPA in 1999. EPA and their contractor, the ACOE, reviewed the report and model. The model was used to support the conclusion groundwater was being captured at the site and to demonstrate that reduced pumping would not result in loss of capture.

The ACOE presented their evaluation of the groundwater model. A summary of the major findings are presented below:

- ACOE suggested that the bedrock aquifer needed to be investigated to determine gradients and groundwater quality.
- ACOE indicated that field data was needed to further support/justify parameter selection for the model. Field data should include: rainfall data, river stage height and groundwater elevations (using data loggers), pump test data, etc., to understand the interaction between aquifer and external stresses (river stage, precipitation, etc.). If available, pumping data from GE should also be included in this data set.
- The ACOE was interested in us expanding the boundary conditions and re-calibrating the model.
- EPA indicated that we should measure river conductance, surface water recharge; etc. He was also interested in how we would measure these parameters.
- EPA was interested in obtaining direct evidence to support our conclusions, where possible. Indirect evidence may also be used, though is less preferred. For example, some indirect evidence (i.e. showing there is no local pumping in the bedrock aquifer, reviewing bedrock water quality, classifying groundwater and evaluating hydraulic conductivities in nearby areas) may be used to alleviate the need for installing and sampling groundwater in bedrock wells.

Moving Forward (Next 2 to 6 Months)

DuPont will check with State to determine how groundwater in bedrock is classified. Will be done as part of the well search.

DuPont will try to obtain pumping information from GE. DuPont will develop a data request and forward it to GE (possibly through Bill Wentworth). EPA and ACOE will prepare a letter requesting additional information on the model.

After the additional information is obtained, the model boundaries will either be justified or expanded and the model will be re-calibrated. DuPont will prepare a modeling documentation report indicating how the model was prepared and summarizing the assumptions used in its development. Prior to generating this report, an outline will be sent to EPA for their review and comment. A Data Summary Report may be prepared as part of this effort.

Andrew will likely send Bill Wentworth an e-mail summarizing the inaccuracies and comments on the draft report issued by the ACOE on the model.

As part of the model modification, the ACOE would like to see over-plots of the Areas of Concern.