Environmental Management Site-Specific Advisory Board - Idaho National Engineering Laboratory



## GROUNDWATER CONTAMINATION AT TEST AREA NORTH AT THE IDAHO NATIONAL ENGINEERING LABORATORY

The Environmental Management Site Specific Advisory Board for the Idaho National Engineering Laboratory (EM SSAB-INEL) supports the selection of Alternative 4 regarding Groundwater Contamination at Test Area North at the INEL. The Board agrees that Alternative 4 provides the most efficient, cost effective method to treat the trichloroethylene and other organic compound contamination levels, and is consistent with recommendations made by the Board concerning Future Land Use Scenarios. Volatile organic compounds (VOCs - such as trichloroethylene) are found in a plume 1 1/2 miles long by 3/4 miles wide, with a radionuclide plume which extends for two or three hundred feet and is migrating to much less extent than the volatile organic compounds. Since the radionuclide plume is smaller, the SSAB supports DOE's emphasis on VOCs in the treatment of TAN Groundwater through Alternative 4 actions.

The Board's support of Alternative 4 is subject to the following understandings: first, that the entire cost of Alternative 4 is estimated to be approximately \$30 million; second, this alternative is expected to reduce the trichloroethylene and other VOCs to 5 parts per billion or less per compound, and DOE will continuously evaluate VOC action and modify or terminate the project if remedial objectives are not being effectively met. Finally, DOE will continue to investigate alternative treatment technologies to reduce the cost and increase the effectiveness of this remedial action. The SSAB would like DOE to report on the effectiveness, costs and pilot results on an annual basis to the Board.

The Board feels innovative technologies should be funded and developed to recover and isolate radionuclides occuring at sites such as Test Area North. Radiologically contaminated areas of the sole source Snake River Plain Aquifer underlying the Idaho National Engineering Laboratory may be an ideal opportunity for demonstrating the feasibility of this principle. DOE should also continue the evaluation of emerging radionuclide treatment technologies.