

Rec'd 8-14-06

OhioEPA
State of Ohio Environmental Protection Agency

Southwest District

401 East Fifth Street
Dayton, Ohio 45402-2911

TELE: (937)285-6357 FAX: (937)285-6249
www.epa.state.oh.us

Bob Taft, Governor
Bruce Johnson, Lt. Governor
Joseph P. Kancellik, Director

August 10, 2006

Mr. Johnny Reising
US Dept of Energy
Ohio Field Office
Fernald Closure Project
175 Tri County Parkway
Springdale, Ohio 45246

**RE: APPROVAL - COMPREHENSIVE LEGACY MANAGEMENT AND
INSTITUTIONAL CONTROLS PLAN VOLUME I AND II**

Dear Mr. Reising:

Ohio EPA has reviewed DOE's *Comprehensive Legacy Management And Institutional Controls Plan (LMIC) Volume I and II (20013-PL-0001) Rev. 0, Final*, received on August 10, 2006. Based upon our review, Ohio EPA approves the LMIC and has included comments to be considered for incorporation into future LMIC and SER documents.

If there are any questions, please contact me at (937) 285-6466 or Donna Bohannon at (937) 285-6453.

Sincerely,



Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric U.S. EPA
Mark Schupe, HSI Geotrans
Michelle Cullerton, TetraTech, EMI

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- As indicated by the relatively large positive value for the layer-specific average residuals, the kriged plume initialized in the model is biased low relative to the well concentrations specified for time equal to zero for the simulation. The initial plume in the model should be adjusted to correspond to the starting concentrations in the target monitoring wells.
- The model time stepping should be adjusted to provide concentration results that more closely correspond to the timing of the concentration measurements in the target wells. The times for the observed and simulated concentrations should correspond as closely as possible.
- The average residual for the entire model increases from 14.6 to 23.1 ug/L from the start of the simulation to the end. The growth in positive magnitude of the average residual indicates that the decline in simulated concentrations is too rapid relative to the decline in the observed values. Obviously, future monitoring data and corresponding modeling are needed to assess whether simulated concentration declines will continue to outpace observed concentration changes. As noted in the Ohio EPA comments on the 2005 SER, a too-rapid of a decline in the simulated dissolved concentration maybe related to inaccurate assumptions regarding the transition of uranium from the sorbed to the dissolved phase.