



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

0048548

053887

Mr. E. R. Skinnerland
200 Area Section Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336



Dear Mr. Skinnerland:

REQUEST FOR APPROVAL TO INSTALL LONGER WELL SCREENS IN CALENDAR YEAR 1998 RCRA WELLS INSTALLED IN 200 WEST AREA

Appendix D of the Hanford Federal Facility Agreement and Consent Order (Milestone M-24-00) Action Plan stipulates that, "Installation of groundwater wells shall mean the wells have been drilled, adequately sealed, and screened over no more than 15 feet of the aquifer unless otherwise approved by Ecology." The U.S. Department of Energy, Richland Operations Office proposes the installation of longer screen in future Resource Conservation and Recovery Act (RCRA) groundwater monitoring wells at treatment, storage, and disposal (TSD) sites impacted by areas of rapid water level declines. Longer screens will extend the life of new wells constructed at these sites and lead to fewer replacement wells, hence optimizing use of resources, and reducing costs.

Replacement RCRA wells are required at the SST T, SST TX-TY, SST U, and 216-U-12 Crib because of rapid water table declines in the 200 West area (Attachment 1). Liquid effluent discharges, principally in the 200 West Area, have resulted in a rise in the water table beneath the TSDs of over 45 feet since 1944. Since the decommissioning of U-pond, and cessation of all effluent disposal to the ground by 1995 the water table in the area has seen an increasing rate of decline.

The water table rate of decline is shown by the hydrograph (Attachment 2). A continuation of water table decline at the current rates will cause water levels to drop below the bottom of the screens in most of the existing monitoring wells by 2000, and the wells will become unusable at that time.

Because of the magnitude of water table decline in the 200 West Area it is prudent to install longer screens in new wells. The increased screen length will greatly extend the useful life of the wells and may eliminate the need for future replacement of these wells. On this basis, it is recommended that 35 foot screens be placed in all new wells drilled within the 200 West Area in CY 98 and that the screen be placed so that no more than two feet of the screen extends above the water table.

053887

Written approval of this request is needed to facilitate CY 98 planning for wells. This action will reduce groundwater monitoring well construction costs by reducing the number of future replacement wells. If you have any questions please contact Mr. M. J. Furman on 373-9630.

Sincerely,

A handwritten signature in black ink, appearing to read "M. J. Furman". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

M. J. Furman, Project Manager
Groundwater Projects

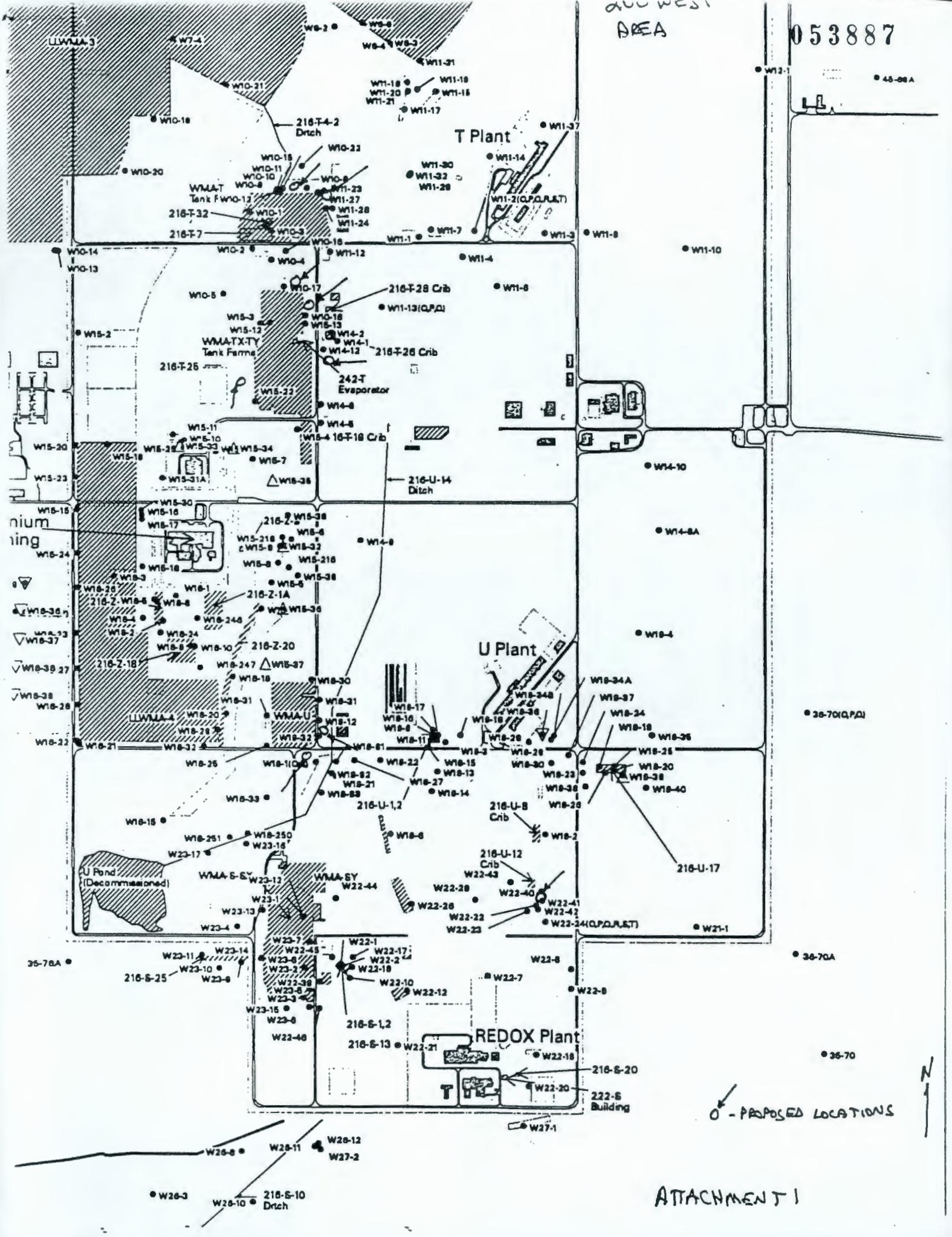
Attachments

cc w/attachs:
S. Leja, Ecology

cc w/o attachs:
R. M. Smith, PNNL

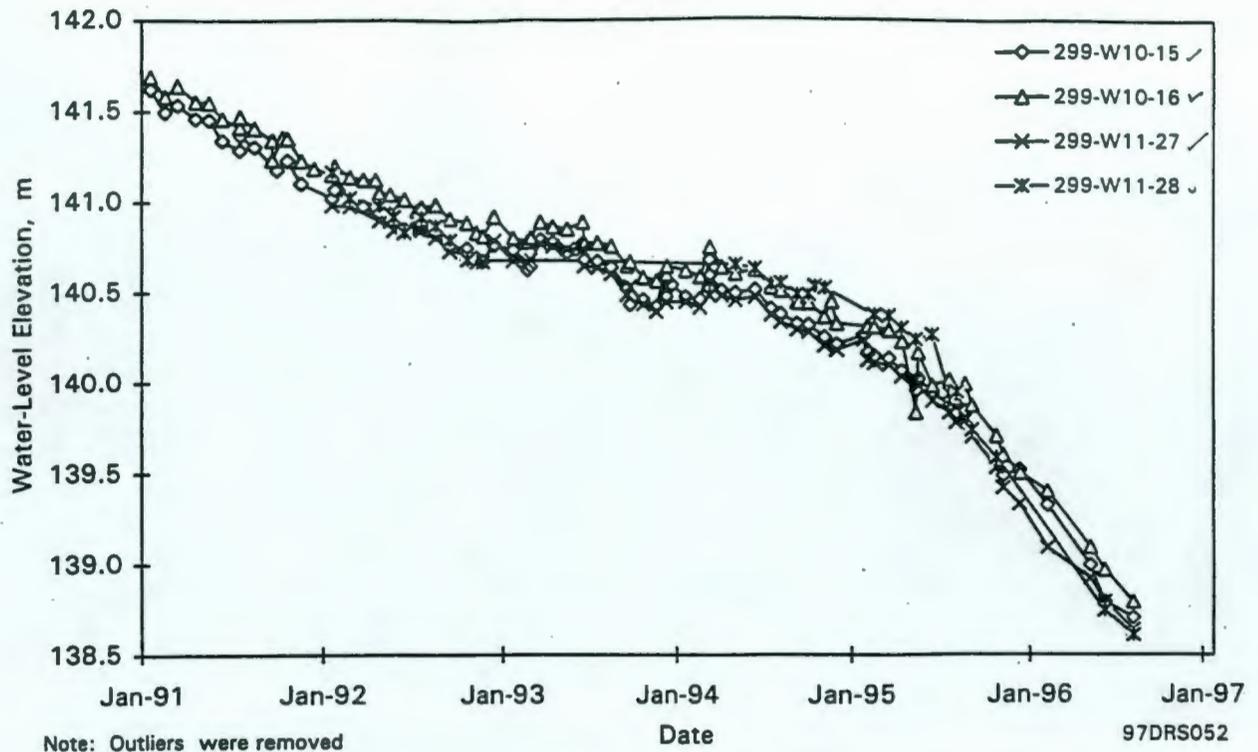
ALL WES 1
AREA

053887

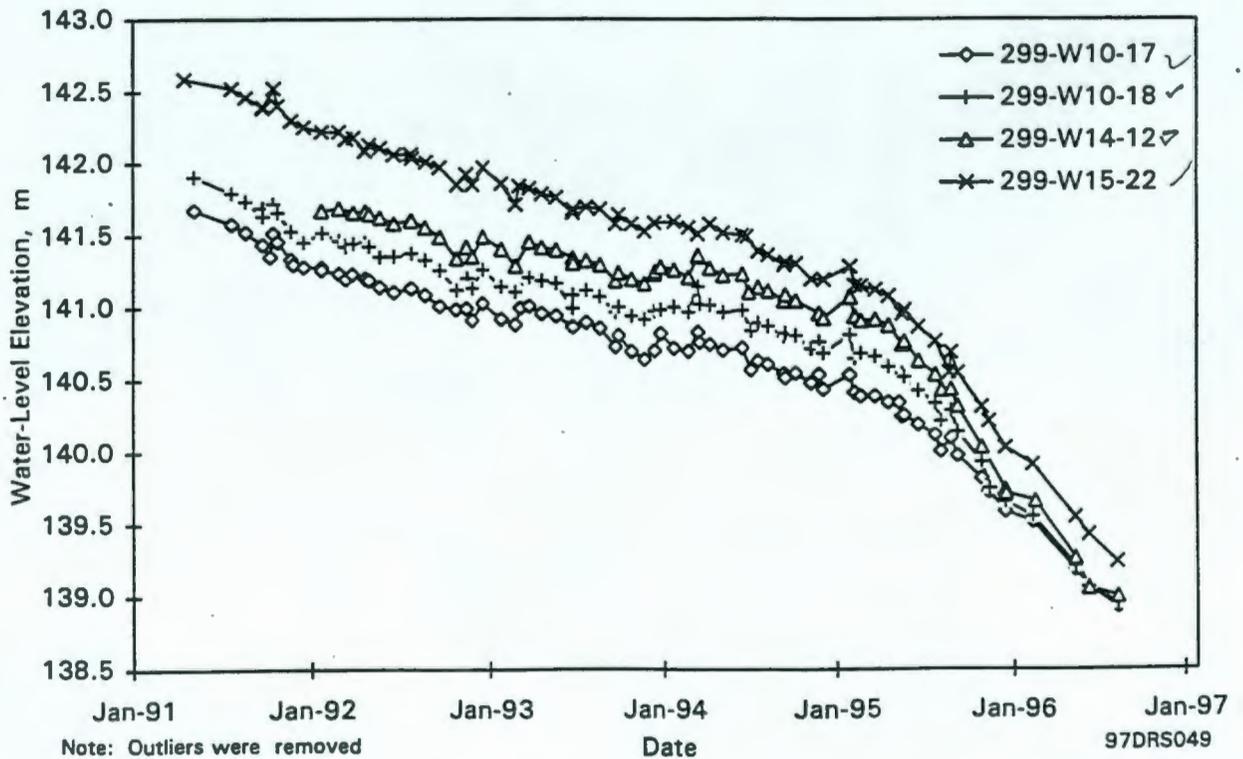


○ - PROPOSED LOCATIONS

ATTACHMENT 1



Water-Table Elevations in Wells Monitoring WMA-T Single-Shell Tank Farm



Water-Table Elevations in Wells Monitoring WMA-TX-TY Single-Shell Tank Farms