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OhioEPA

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George V. Voinovich, Governor
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February 10, 1998

RE: DOE FEMP
RESPONSES: DMEPP RtC
JANUARY 1-JUNE 30, 1997

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Dear Mr. Reising:

This letter provides Ohio Environmental Protection responses to the Comment response document for the draft South Plume Removal Action System Evaluation Report for January 1-June 30, 1997.

If you have any questions, please contact Tom Ontko or me.

Sincerely,

Tom Ontko

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

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Ruth Vandergrift, ODH
Mark Shupe, HSI- GeoTrans, Inc.
Francie Barker, Tetra Tech EM Inc.
Manager, TPSS/DERR.CO

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means to adequately evaluate the daily variability in groundwater extraction rates and periods of well outages. This information is currently obscured in the report format.

Response # 8 We do not agree with the assertion that the western edge of the 20 ppb plume is adequately defined. We believe that the plume delineation to the west of MW 2551 is ambiguous. Groundwater elevation contours in Figure 1-13--Groundwater Elevations, Type 2 wells, April, 1997 in the draft Integrated Environmental Monitoring Status Report for Third Quarter 1997 suggest that groundwater flow at Monitoring Well 2551 may be to the southwest. We realize that the capture zones in Figure 1-28 of the IEMP third quarter 1997 status report do imply capture in this area, but the ambiguity exists in the measured data, not the modeled interpretation. MW 2017 is to the North and does not help to define the plume to the west. DOEs argument that the gradients are from monitoring well 2017 south to MW 2551 does not appear germaine to our concerns. The Ohio EPA will continue to evaluate the flows in this vicinity using the data in the quarterly Integrated Environmental Monitoring Status Reports. If plume expansion or failure to maintain plume capture is occurring, additional actions will be necessary.

Ohio Environmental Protection Agency Comments on the
RtC on the draft South Plume Removal Action System Evaluation Report
for January 1-June 30, 1997

Response # 3 DOE does not believe pumping rates should be increased above their optimal pumping rates (300 gpm for RW-1 and RW-2, and 400 gpm for RW-3 and RW-4) when individual wells are down for routine service. This is counter to the extraction strategies described in the Operations and Maintenance Master Plan for the Aquifer Restoration and Wastewater Treatment Project--Final, November, 1997, Figure 5-7. This figure describes operational guidelines for well field abnormalities including South Plume well outages. In particular, for conditions where wells are not operating for periods of one week or greater, Figure 5-7 indicates that other wells within the South Plume extraction network must be increased to compensate.

According to the Draft South Plume Removal Action System Evaluation Report, RW-4 was inoperative for a period greater than one week from November 27, 1996 through January 8, 1997. Other South Plume extraction wells also were also non-operational for periods greater than one week, e.g., RW-2 and RW-3 were both non-operational for the majority of May 1997.

DOE has offered three reasons why it was not necessary to increase pumping at other South Plume extraction wells:

> Increased pumping at certain extraction wells could adversely affect the PRRS contaminant plume trajectory.
>
> If the conditions of the well maintenance in April 1997 are considered, groundwater modeling indicates that when 1000 gpm of groundwater is extracted, plume capture is still maintained.
>
> Concentrations of groundwater in the vicinity of RW-4 were anticipated to be below the 20 ug/L concentration limit.

For the conditions described above, DOE has made persuasive arguments why the Operations and Maintenance Master Plan was not followed. However, it has not indicated that any refinement of the guidance is necessary. To best address these inconsistences, a revised guidance should be presented that specifies operation that is consistent with DOE's aquifer restoration performance commitments. The need for such revision is especially critical as the site groundwater remediation system becomes increasingly complex.

Response #5 Daily extraction rate information should be included with the Integrated Environmental Monitoring Status Reports. This should be reported both graphically and in either a tabular appendix or in an electronic file. This would provide the reviewer with a rapid